NASIS Training Proceedings February 1-5, 1999

MLRA-11

Indianapolis, IN

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Forward

The purpose of this manual is to provide soil scientists in the region with a set of materials for reference. It is intended that these materials could be used at the local level to help train field staff. In addition this course was designed as a pilot to the proposed “Soil Correlaton and Management of MLRA Project Offices NEDS course”.

One of the main purposes of the 1999 NASIS training course in Indianapolis, Indiana was to dispel the myth of the NASIS super-user. The individual with the most power in NASIS is the project leader with the permission to edit his/her own data. There is a system administrator with dataset manager privileges. However, the only power that he holds is the ability to add users, assign users to groups, and assign permissions to edit data to groups.

During 1997 and 1998 the Soil Data Quality Specialists in Indianapolis assisted the field with the editing of data. The purpose of this was twofold. On the one-hand, it provided a training opportunity for the Soil Data Quality Specialists to learn about NASIS. On the other-hand, it helped get the product out (soil surveys). This training session (February 1999) marks a turning point. The Soil Data Quality Specialists were called upon to train the field soil scientists. They presented materials concerning what they had learned over the last couple of years. No longer is it necessary to call one individual for answers to common problems. The instructors of this course are now officially your contacts for everyday NASIS questions. As you become more proficient in NASIS, you will take the place of the Soil Data Quality Specialists as the points of contact for common NASIS questions.

The functions of the MLRA-Regional office include the system administration of the in9000 which runs NASIS. In addition, the MLRA Regional Office is committed to assist in the writing of queries, reports, and interpretations for the general use of our NASIS users. In time, the field will perform more of the query writing, report writing, and interpretations generating than the MLRA-Regional Office. We will also assist in obtaining downloads when local connections do not perform well. However, it is the responsibility of each local office to maintain the soils data for the survey areas for which it is responsible, and to provide users with downloads as authorized by the State Soil Scientists and State Conservationists. The project leader is the new NASIS "superuser".

NASIS Training Agenda

February 1, 1999

12:30 - 1:00 Registration / Introductions

1:00 - 1:20 Opening remarks (Travis Neely)

1:20 - 2:45 Housekeeping Introduction to the class format

2:45 - 3:15 How can NASIS be used to review data (Scot Haley)

3:15 - 3:30 Break

3:30 - 3:45 State Office role in data review and approval

3:45 - 4:00 Correlators role in data review and approval

4:00 - 4:15 Project leaders role in data review and approval

(Review products requested and protocols either existing or proposed to be discussed at the training session)

4:15 - 4:30 Hand out handouts for the duration of the training if they have been prepared

4:30 - 5:00 Set up workgroups

Naming of data mapunits

Format of the regional legend/state/MLRA/ legends

Identification of Type Locations - Data associated with OSD's

Protocols for data review

Where or should the 1990 frozen values be included in the NASIS database

At this time the tone is set for the duration of the training

February 2, 1999

8:00 - 9:00 Quick overview of NASIS potentials and possibilities (load a selected set)
Review of queries Bennie Clark, Henry Ferguson
Review of reports Mack Hodges, Bill Frederick

9:00 - 9:30 National Soil Survey Laboratory Database Charles Love
National Data Access Facility/Pedview
Access Database
How do we get our laboratory data into NASIS. Who fills out the 8's and how do they get reviewed for submission to NSSL.

9:30 - 9:45 Break

9:45 - 10:30 Indiana and Illinois State Databases in Access Queries and Reports Scot Haley

10:30 - 11:00 Pedon coding Program in NASIS and In UNIX
How do we implement the use of PEDON in NASIS Mike Wiggington
How do we get our pedon data into NASIS?

11:00 - 11:30 Coding a Pedon in NASIS - Highlights Bennie Clark

11:30 - 12:30 Lunch

12:30 - 1:00 Continue coding pedons in NASIS Bennie Clark assisting

1:00 - 1:30 What about all this Transect Data? Shane McBurnett, Sam Indorante

1:30 - 2:00 Is there any way that the University can help populate data elements in NASIS - Pitfalls in reviewing data. Dr. Ken Olson Professor UofI

2:00 - 3:00 How can the data be indexed so that we can manage it better?
State legends - Mack Hodges Bennie Clark
MLRA legends Rock Falls Bill Frederick
Update reports

3:00 - 4:30 Breakout groups and practice

It may be best to rotate among computers for this session.

Suggested practice session.

Site #1 Going to the National Database Access Facility to review laboratory data

Site #2 Reviewing the principles of using Access to query and run reports on the Illinois and Indiana State Databases.

Site #3 Practice naming data mapunits and try out queries to retrieve them. (Naming of data mapunits breakout group)

Site #4 Edit pedon data and link to components (Identification of Type Locations and data associated with OSD's breakout group)

Site #5 Build legends and associate data with them. (Format of State/Regional/MLRA legends breakout group)

Site#6 Where should the 1990 Frozen Values be put in NASIS or should they be put there at all.

Other computers: Enter data for your county/ask for an editing job to practice editing in NASIS.

February 3, 1999

6:00 - 8:00 AM If you are on FLEX time, you are free to use this time to edit data or to meet with other soil scientists to discuss the breakout group topics.

8:00 - 8:40 Charles Love and Byron Nagel
Use of Text Notes for Correlation Documents
Use of Text Notes for Legend Management
Use of Text Notes for DMU Management
Use of text Notes for Pedon Management

8:40 - 9:15 Report on the Location of 1990 Frozen values in NASIS. Will they exist in NASIS and are they official? William Hosteter

9:15 - 9:30 Break

9:30 - 11:30 Protocols for data review and data entry
General discussion/presentations if prepared
Routing of data
Approval Authority
What data entry should take place at
MO Regional Office
State Office
MLRA Project Office
Area Resource Soil Scientists
Project Leaders and staff

1:30 - 3:30 John Doll, Gary Struben, Asghar Chowdery
Quick review of editing principles
Cut and paste
Global edits
cell copy and paste/ (does not work with dxpc)
Water Table edits
Calculated data elements
Soil Taxonomy Old vs New and calculations
Use of edit setup (hands on session)

3:30 - 4:30 Break out groups continue
Site#1 Going to the National Database Access Facility to review laboratory data

Site#2 Reviewing the principles of using Access to query and run reports on the Illinois and Indiana State databases.

Site#3 Practice naming data mapunits and try out queries to retrieve them. (Naming of data mapunits breakout group)

Site#4 Edit pedon data and link to components (Identification of Type Locations and data associated with OSD's breakout group)

Site#5 Build legends and associate data with them. (Format of State/Regional/MLRA legends breakout group)

Site #6 Priorities for population of data elements in NASIS.

Site #7 MUG/State Crop and State Pasture Shells
Other computers: Enter data for your county/ask for an editing job to practice editing in NASIS.

4:30 - 6:00 Optional practice time for individuals on Maxi flex.

February 4, 1999

8:00 Data population of minor components Gary Struben

8:30 9:45 Byron Nagel

Manuscript reports Which do we use?
How to run queries and reports to generate reports appropriate for manuscripts

Shall we start including minor components or not and when?

What about adding a percent to each component in the tables?

Use of the major component flag.

9:45 - 10:00 Break

10:00 - 11:30 Editing practice - Breakout groups finalize reports

11:30 - 12:30 Lunch

12:30 - 1:30 Understanding downloads Bill Frederick/Russ

SSURGO and FOCS downloads
What Queries should be run?
What about the Major component flag?
What data are we really getting in the downloads?

1:30 - 4:30

2:30 - 2:45 Break

Breakout group reports
Discuss handouts prepared by each breakout group

4:30 - 6:00 Time for Maxiflex individuals to finish up projects if they wish.

FRIDAY

8:00 - 11:00 Handout proceedings of training session. Go over the handout and finish any last edits to tables and/or edits to proceedings.

11:00 - 12:00 Closing remarks and adjourn

Major changes to the agenda: Russ Kelsea did an excellent review of the following:
How NASIS has developed over the last few years.
How queries work-target tables and selected sets.

Check List Of Functions:

NASIS TRAINING 2-1-99 THRU 2-5-99

As you review handouts, participate in discussions, and listen to presentations, you should use the following check list of functions as a guide and check each off as you begin to acquire the appropriate knowledge required in understanding and performing each of these tasks.

Once you have checked all of these items, the training objectives for this course will have been met.

1. Run a query to load all the data for a county.
2. Run a query to load all the data for a component from one legend.
3. Run a query to load all the data for a component from all legends in a state.
4. Run a query to load all the data for a component from all data mapunits in the region.
5. Understand how to load all the data for a component from all data mapunits in the country.
6. Run a query to load all the data for a single horizon of a component for all data mapunits for a state.
7. Run a query to load all the data for a single horizon of a component for all data mapunits for the region.
8. Run reports off the selected sets and observe the differences in the reports.
9. Be able to run all reports for generating a manuscript.
10. Run reports for checking K factors, particle size fractions, and pH.
11. View laboratory data sheets on the WEB by going to the National Database Access Facility
12. Run queries and reports in access against the national and local databases.
13. Write your own query and properly link tables in access.
14. Write your own report in access using a query and verify the results against laboratory data sheets.
15. Have an awareness of the soil 8 process. Selected individuals may be called upon to complete soil 8's after the class is over.
16. Have an awareness of how pedons are being coded and where they will be placed in NASIS.
17. Input one pedon and link it to a component.
18. Understand how structure is stored in NASIS.
19. Understand how iron and manganese accumulations are stored in NASIS.
20. Understand how the pedon edit setup can be used to help decrease input time.
21. Print out a pedon description.
22. Load a legend and data mapunits and use the load related command to retrieve your pedon.
23. Have an awareness regarding the potentials for placing transect data in NASIS.
24. Obtain the phone numbers of individuals who may be able to help you manage your transect data.
25. Decide how you will name your datamapunits.
26. Understand why there can be more than one naming convention for data mapunits.
27. Decide how you will index your data so you can find it.
28. Understand how to make a backup of your legends and the proper way to store them in NASIS.
29. Understand why there are Archive legends in NASIS and what purpose they are good for, and which short comings they have.
30. Be aware of the state legends in NASIS and how they can be used.
31. Be aware of how MLRA legends are created and managed.
32. Be able to properly create a text note and place it in the proper category.
33. Be aware of which 1990 frozen values are in NASIS, which are not, and whether or not there is a plan to place any of the 1990 frozen values in NASIS.
34. Be able to edit values in the component tables

35. Edit the following values
    a. Hydric criteria
    b. Hydric soil rating
    c. Shrink-swell
    d. Water tables
    e. Data-mapunit crop yields
    f. Component crop yields
    g. pH
    h. Interpretations
    i. Windbreak tables
    j. Forest productivity tables

1. Print out reports to check your edits
2. Print out the local forest productivity report and the national woodland reports and compare them. Understand why you can not edit forestry interpretations.
3. Have an understanding about which data you can and can not edit. Understand which data you should copy so that you can edit it, and which data you should link to and go through proper channels to get the changes made to the data.
4. Understand what to do about data which is locked with an L.
5. Understand what to do about protected data.
6. Understand the advantages and disadvantages to copying data.
7. Understand the advantages and disadvantages to linking data.
8. Understand how to populate inclusion data and how you will note the names of the inclusions in the component text notes if generic names are used for inclusions.
9. Perform a FOCS download.
10. Perform a SSURGO download (go to the point of creating the download and then abort…..).
11. Telnet to the in9000.
12. ftp to the in9000.
13. anonymous ftp to Fort Collins.
14. Read the NASIS homepage.

Participants:

Jennifer Berman	Soil Scientist	Naperville, IL	NRCS
Asghar A. Chowdhery	Soil Data Quality Specialist	Indianapolis, IN	NRCS
Bennie Clark, Jr.	MLRA Project Leader	Indianapolis, IN	NRCS
John Doll	Soil Data Quality Specialist	Indianapolis, IN	NRCS
Doug Dotson	MLRA Project Leader	Wilmington, OH	NRCS
Tonie Endres	MLRA Project Leader	Charleston, IL	NRCS
Henry Ferguson	Soil Data Quality Specialist	Indianapolis, IN	NRCS
Bill Frederick	Soil Liaison	E. Lansing, MI	NRCS
Jeff Glanville	Soil Scientist	Findlay, OH	NRCS
Scot Haley	Resource Soil Scientist	Indianapolis, IN	NRCS
Steve Higgins	Soil Scientist	Rock Falls, IL	NRCS
Mack Hodges	Asst. State Soil Scientist	Champaign, IL	NRCS
Bill Hosteter	Soil Scientist	Indianapolis, IN	NRCS
Sam Indorante	MLRA Project Leader	Carbondale, IL	NRCS
Erik Johnson	Soil Scientist	Manistee, MI	MDA
Russ Kelsea	Soil Scientist	Lincoln, NE	NRCS
Marty Kroell	Area Resource Soil Scientist	Grayling, MI	NRCS
Randy Leeper	Soil Scientist	Carbondale, IL	NRCS
Charles Love	Soil Data Quality Specialist	Indianapolis, IN	NRCS
Dena Marshall	Soil Scientist	North Vernon, IN	NRCS
Shane McBurnett	MLRA Project Leader	Plymouth, IN	NRCS
George McElrath	Resource Soil Scientist	Corydon, IN	NRCS
Ken McWilliams	Resource Soil Scientist	Jasper, IN	NRCS
Ed Miller	Soil Survey Coordinator	Columbus, OH	ODNR
Byron Nagel	MLRA Project Leader	North Vernon, IN	NRCS
Rick Neilson	Soil Scientist	Kaleva, MI	NRCS
Steve Neyhouse	Soil Scientist	Corydon, IN	NRCS
Rick Robbins	MLRA Project Leader	Findlay, OH	ODNR
Jerry Shively	Resource Soil Scientist	Greencastle, IN	NRCS
Norm Stephens	Soil Scientist	Indianapolis, IN	NRCS
Gary Struben	Soil Data Quality Specialist	Indianapolis, IN	NRCS
Steve Tardy	MLRA Project Leader	Houghton Lake, MI	NRCS
Bob Tegeler	MLRA Project Leader	Springfield, IL	NRCS
John Werlein	Soil Scientist	Mio, MI	NRCS
Mike Wigginton	Project Leader	Indianapolis, IN	NRCS

Reports

Thanks

Thank you to all the participants for participating in the work groups. A major function of the work groups was to focus the training. It should be noted that the members of these workgroups may not have had the experience to come up with concrete conclusions during the course of the training. However, it is hoped that the individuals involved in the work groups would carry their experiences home, work in NASIS and keep the mission of the work group in mind. As more experience is gained, the participants may be able to formulate more concrete alternatives and help provide guidance to the region.

Placement of 1990 Frozen Values in NASIS

Date: February 9, 1999

Task: To decide where to store the 1990 frozen soils data

Group: Scot Haley Resource Soil Scientist Indianapolis, Indiana
Ken McWilliams Resource Soil Scientist Jasper, Indiana
George McElrath Resource Soil Scientist Corydon, Indiana
Jerry Shively Resource Soil Scientist Greencastle, Indiana
Bill Hosteter Soil Scientist Indianapolis, Indiana
Mack Hodges Soil Scientist Champaign, Illionios

Results: Consensus was reached that the three options should be as follows; 1) Store them in NASIS as a separate legend. 2) Scan the hard copies into word. 3) Store in Access. Consensus was not reached as to the best choice. Russ Kelsey hinted that NASIS was not the best place to store it right now. The group did not have a chance to get together after that discussion. I would assume that the group would suggest storing them in Access.

Reporter: Scot Haley

Suggestion for future discussion: Assemble electronic versions of the data into one tab delimited or pipe delimited file. Store in NASIS as a single legend text file that could easily be exported to Access, Excel or any other database or spreadsheet program by simply printing out a single legend text report from NASIS and saving it as a file for import.

Use of Regional, State, MLRA, or County Subset Legends.

Task: Come up with a recommendation for the management of the above types of legends.

Group members: Asghar Chowdhery
Shane McBurnette
Steve Higgins
Bennie Clark
John Werlein
Rick Neilson

The consensus of the group was to recommend the building of Major Land Resource Area Legends. The County Subset Legends would be created by picking mapunits from the MLRA Legends. The datamapunits would then be updated and run a subset report for a manuscript. The Data Mapunits will be linked to both the counties and the MLRA legends at the same time.

There was no consensus regarding Regional or Statewide legends. At this time there are two statewide legends in MLRA-11. The Indiana and the Illinois state legends exist, however at this time only the Indiana state legend is being maintained. The Indiana State Legend is being maintained by the three MLRA Project Leaders in Indiana.

There is no Regional Legend at this time and there is not enough support to create or maintain one at this time.

Comments from Charles Love, SDQS concerning MLRA and County Subset Legend:

I do support building MLRA Legends to better conduct MLRA Correlation and Soil Business Activities, within MLRA.

But first, all MLRA Project Leaders should establish a MLRA Identification Legend steering committee, involving other Project Leaders, Subset Soil Scientist, Resource Soil Scientists and cooperators within their MLRA Survey. This committee will help that MLRA Project Leader(s) to establish the most workable MLRA legend and common data map units for that legend. They would review all the published soil surveys, lab data and historical data within the MLRAs. Then they would eliminate or de-select those map units or data map units that are no longer suitable.

Having a committee of soil scientists (totally over 150 years of experience) will be very helpful in facilitating this process.

The vision is to have one common map unit symbol legend and possibly one data map unit per map unit to ensure complete soil data sharing and development of seamless soil maps within and across MLRAs.

I really think the MLRA legends are needed for facilitating the NASIS database efforts. Fewer legends, map units and data map units stored in NASIS database will better help in linking and building fewer data map unit within those MLRAs and the region. This will promote perfect joins across county, state and MLRA lines and helps achieve soil survey updates and digitization efforts.

We do not have the time to update or maintain one county at-a-time, we need to complete these efforts by groups' of counties. This MLRA Legend will help these efforts.

DRAFT 2/99

Protocol for making changes to Data Mapunits (DMU's) and Official Soil Series Descriptions (OSD's) common to Region-11 and Adjacent Regions

1. MLRA Project Leader (MLRAPL) in whose area the OSD or DMU resides will maintain and coordinate changes to these objects. Resource Soil Scientists (RSS) will maintain and coordinate changes to the data for published Soil Surveys, but all changes need to be coordinated with the MLRAPL.

2. Requests for changes to an OSD or DMU will be made to the MLRAPL with responsibility for these objects. When applicable, the requested change(s) to components of a DMU are to be based on actual lab or field test data.

3. MLRAPL with responsibility for the OSD or DMU will coordinate with RSS in his area, and MLRAPL and RSS from surrounding MLRA's for their comments on the requested OSD or DMU change. The minimum area to canvass will be all Project Offices within the MLRA and other MLRA Project Offices that have correlated the map unit in the past. It is the responsibility of the other MLRAPL's to coordinate the request for changes with the RSS's who work in their MLRA area.

4. After comments are received, the MLRAPL with responsibility for the OSD or DMU makes a preliminary decision on the requested change(s), and submit them to the Technical Committee for review. (See page 14)

5. The Technical Committee will review the requested changes to the OSD or DMU for approval. If the Technical Committee does not agree to the proposed change or changes, the SDQS in the role as correlator will determine the need for a new OSD or DMU.

6. MLRAPL will notify the SDQS Liaison when a request to change the DMU is approved by the Technical Committee.

7. The SDQS responsible for routing changes to OSD's or DMU's among MO Regions, are to request to receive comments within 30 days.

SUMMARY REPORT 2/3/99

Technical Committees are established for reviewing and concurring on changes to Official Soil Series and Data Mapunits.

Establish four Technical Committees based on the same MLRA areas of responsibility as with the SDQS's.
99/111
113/114/115/120/121/122
94A/96/97/98
95A/95B/108/110

Each Technical Committee will select a Chairperson and Recorder.

It is suggested that each Technical Committee be comprised of the following:

State Cooperators (DNR's, AG agencies, Consultants)
University Cooperators
Resource Soil Scientist
Technical Specialists (Foresters, Biologists, Agronomists/Resource Spec., Engineers)

Action Items

The State Soil Scientist or State Soil Liaison is to coordinate establishing and identifying those who will comprise the Technical Committees.

MLRA Board of Directors submit this protocol as policy for Region-11.

Subjects for future discussion:

Are there data elements that can be populated with only the approval of the individuals using the data mapunit? ie. No routing to SDQS or to ARS using the series but not the same data mapunit

Can specific data elements be identified that should be routed for informational purposes only, and do not need approval authority?

Can specific data elements be identified that must go through the rigerous approval authority as outlined in steps 1-7 above?

When is it OK to update a data element? Can proposed changes be incorporated into update data mapunits prior to approval for the purpose of printing out reports for review?

Proposed changes to published data and changes to update data mapunits that are used by multiple surveys must be routed and approved prior to incorporation into the database.

Populating Data Elements – Priority

Working group members:

John Doll
Tonie Endres
Bill Frederecks
Bob Tegeler

The work group went through the list of NASIS data elements and identified the following elements as being those that are needed for population. The reason for the need to populate the data elements is often program or project driven. MUG (and the production of other soil survey manuscript materials) is one program that requires the population of many of the elements on the list.

The list:

Populate the included soils (I guess we were thinking %, kind, and name in addition to attaching data mapunits.)
Populate parent material and geomorphic data fields.
Populate ponding duration;
Populate runoff class
Populate data for restrictions
Populate data for surface fragments.
Populate earth_cover data
Populate soil moisture data.

Populate particle size fractions for sand and silt.

These data elements were orally presented to the NASIS workshop members. During the presentation of work group findings, Russ Kelsea brought up the interp-generator and fuzzy logic. Running interps w/ fuzzy logic will identify data elements that were needed for the interp but were void. To complete the process, the interp generator would insert default values. A report is generated that identifies data elements that used default values.

It is activities like this that will help us identify other data voids. Other data elements will be added to the list as they become known.

Identification Of Type Locations

Work Group Members:
Jennifer Berman
Rick Robbins
Mike Wigginton
Randy Leeper
Marty Kroell
Gary Struben

The charge for this work group was to identify a way of indicating in NASIS which Data Mapunit is representative of a given type location, especially OSD type locations.

The group listed, in order of priority, the type locations we would like to be able to identify:
1. OSD
2. MLRA by map unit phase
3. Subset by map unit phase

The group listed the following options for identifying type locations:
1. Put type location tag in DMU Description
2. Use text fields, probably data mapunit text and set up categories for OSD, MLRA, SUBSET, etc.
3. Use PEDON in NASIS and indicate by pedon type from choice list
4. Create new data element

The group preferred not to use Option 1 because of adding length and confusion to the DMU name. Option 2 seemed to be a viable option, particularly for type locations other than the OSD, but needs to be coordinated with the group working on text notes. Option 3 was not preferred because few pedons are currently in NASIS, but could be used more in the future. Option 4 was preferred by the group, especially for OSD type locations.

Thus, the group would like to request that a data element be added to indicate, at the minimum, the OSD type locations. This would help NASIS users better identify and evaluate DMU's and give a link between the OSD files and NASIS.

The group also recommends that in the REMARKS section of the OSD, the DMU ID or DMU Description be listed that represents the OSD type location. DMU's that represent other phases could also be listed if known.

Naming of Data Mapunits

Working group members:
Dena Marshall
Rex Brock
Doug Dotson
Steve Neyhouse
Steve Tardy
Charles Love
Marie Roberts

The following consensus was arrived at by this working group.

The data mapunit name should contain the following elements:

State code
County fips code
Map unit symbol
Major component names

No consensus was agreed upon regarding the inclusion of phase terms, codes indicating the presence of supporting laboratory data, or the inclusion of horizon layers from a Typical Pedon from an Official Series Description.

This group did not feel that it had enough experience in NASIS or time enough to tackle this problem in its entirety. Therefore much of the meeting consisted of information gathering and discussion. It would be helpful for this working group to meet again after a few months of practice in NASIS to discuss the issue.

Some comments and information for consideration:

There are currently 43353 data mapunits in the MLRA-11 NASIS database.

One advantage of renaming some of the data mapunits would be to differentiate them from other data mapunits that have not been renamed. This is one good reason for NOT renaming all data mapunits.

There is nothing that says that all 43353 data mapunits must or even should follow the same naming convention.

Examples of some unique names for data mapunits.

(no name is certainly valid, but does not tell you anything about the data mapunit)

AddC2 Typically this was a data mapunit for an additional symbol. There is no data in the tables nor are there any notes unless they are populated after SSSD conversion.

Delaware null (This name indicates that there is no data in the data mapunit tables. This type of data mapunit might be considered a place holder to which to link all the mapunits from an older legend for which no attribute data has been populated in NASIS)

Adams update null (This is a similar instance to the situation above, except in this case the one data mapunit is used to link all of the mapunits for an update legend until specific data mapunits are selected for linking.

IN001AddC2 This name indicates that the data mapunit is from Adams county, Indiana and is associated with mapunit AddC2

IN001AddC2 Adco This indicates that the data mapunit is from Adams county, Indiana and that the major component in the data mapunit is Adco soils.

IN001AddC2 Adco sil 8 to 12, eroded (Same as above except that the phase terms have been added)

IN001AddC2 Adco sil 8 to 12, eroded Type Location (Same as above except that the word type location has been added)

111 94B 98B These are the MLRA's that this data mapunit is assigned to. There is no description indicating what components are in the data mapunit or which mapunits it is associated with.

IN001AddC2 111 94B 98B This name indicates that the data mapunit is from Adams county, Indiana and is associated with mapunit AddC2, and is being used in MLRA's 111 94B and 98B.

There are advantages and disadvantages to each naming convention. It is up to the field staffs to experiment with naming their data mapunits in such a way as to help them manage them the most efficiently.

Please give these naming conventions some thought and try them out. Which ones work best for you? Remember, more than one naming convention may be appropriate for different situations. We do NOT want to rename all 43353 data mapunits. We only want to rename those data mapunits that are being used on a daily basis and that have particular significance to the update soil survey process.

States Role in Data Review and Approval By Bill Frederick

In Michigan we have undertaken the following policy:

For ongoing soil surveys that are to be published, once the final correlation conference has taken place and the county project leader has completed the soil survey manuscript and has completed making all edits and corrections to the NASIS data, a final copy of the tables to be used in the manuscript are printed from the NASIS data and this set of tables is given to the MLRA Project Coordinator to review.

The MLRA Project Leader will review the tables, cross check to the manuscript (if the MUG program was not used to complete the manuscript) and note any problems. The MLRA Project Leader will then discuss any problems he sees with the county project leader.

As an example, in Michigan we have developed guidelines for populating the soil moisture table in **NASIS** (on an MLRA basis) and the **MLRA** Project Leader will ensure that these guidelines were followed for populating the data.

MLRA Legends In Michigan by Bill Frederick

In Michigan we have developed two MLRA legends so far below the bridge. The first one of these (MLRA 94A) was really developed before the advent of NASIS. We started with the soil survey legend for Alcona County, Michigan and built on it from there.

At one of our first Steering Committee Meetings we then reviewed each mapping unit from other modern soil surveys that were published before the start of the MLPA legend to determine if the mapping unit was going to be added to the legend. The mapping unit had to be one that we knew would be used across extensive areas. If there were any questions about the unit, it was not added.

With each successive county progress field review mapping unit numbers were reserved and added to the MLRA 94A Legend. The project leader had to document the unit (ie soil descriptions, note cards, etc.) in order for the unit to be added to the legend.

We now have a MLRA 94A legend with mapunits, but we have not yet linked the mapunits to the "modal" data mapunit. This was done in this fashion, because we felt we would not know which county type location would be most appropriate one to use to represent the "modal" data mapunit until the MLRA is completed. Each county subset has its own type location in the published soil survey.

Now that the initial mapping for the MLRA is nearing completion the MLRA Project Leader will be starting the process of determining Series MLRA type locations and linking all map units that contain that series to the appropriate data map unit.

Presentations/Handouts

Correlators (SDQS) role in data review and approval

(1/29/99)

Maintain Quality Assurance of the NASIS data

1. Does the amount and accuracy of data support the interpretations and classification of the soils of the defined geographic areas

2. Does the data support the estimated soil properties in NASIS

Facilitate the review of the soil survey interpretation data for quality assurance from the field, state and regional level

Maintain a protocol for review and edits within and outside the MO region

1. To help make consistent, accurate, and defensible interpretations, this collection of comments about data mapunit records for a survey area.

Assist in facilitating MLRA work groups to review and make recommendations for soil data elements

2. Recommend and priorities data elements to be populated in NASIS by MLRA Field Staffs

Assisting in providing NASIS Training

Query Review by Bennie Clark

Under local a query is
10024 Area/Legend/DMU by Area (from Bigler)
This query requires that one or more tables be selected and that the Area Symbol be provided as well as the Survey status.

This means that to pull up Fountain County Indiana you would type IN045 in the first block and then select update or type a u in the second block which brings up update.

Note that this query is case sensitive in045 or In045 will not work!

If you select all 5 tables you have loaded all the data for the update survey.

If you only selected the legend, that is all that you would have gotten.

If you load all data for a legend, all reports should work.

If you only load legends, then only legend reports will work. If any table is called for in a report and you do not call it up in your selected set, that report will come up empty.

A Sample Query to Load Horizon Data

To load horizon data, you may wish to use the query '**a revised MLRA Kfactor selection'**.
By selecting the horizon table you will load only certain horizons.
You must input IN* for data from Indiana or a * for data for all states in the database.
The component name can be in any case.
You can specify texture such as sil, sicl, or l, or use a * for all textures.
You can specify an H1, H2, H3, or H4 for an individual horizon or * for all horizons.
You can specify a real Kf number such as .20 or .43 or use a * for all Kf's.
Note that if you pointed to the component table you would get all horizons.

Some local queries of interest

Legend by name (all status)

Component text by area & kind & category

Component text by area & kind & category & subcategory

Data mapunit text by area & kind & category

Data mapunit text by area & kind & category & subcategory
(same pattern for Mapunit, Legend, and Horizon)

MO 11-MLRA Legends (subject of regional legend)

MO 11-Type location Data Mapunits for a series

Component by component name and survey area
This query is very helpful for populating windbreak and woodland data. It is used to load all components in a given woodland group for global pastes.

MO-11 load the major components of a survey area.
This query allows you to print manuscript reports without inclusions or minor components.

Areas
Used to load all areas. Can also be used to load backup areas.

Apply and type *backup* or *back*car* to get backup area for Carbondale Illinois.

National

Area/Legend/DMU by area and legend status (all MUs).

DMU by component name.

Query by query name. (Just lets you look at queries).

Report by report name. (Just let you look at report scripts).

New developments in the MLRA-11 NASIS database by Henry Ferguson

Marie Roberts and I have developed a set of queries to select text notes based upon area, status, kind, category, and subcategory. The queries are named as follows.
Component text by area & kind & category
Component text by area & kind & category & subcategory
Data mapunit text by area & kind & category
Data mapunit text by area & kind & category & subcategory
Horizon text by area & kind & category
Horizon text by area & kind & category & subcategory
Legend text by area & kind & category
Legend text by area & kind & category & subcategory
Mapunit text by area & kind & category
Mapunit text by area & kind & category & subcategory

Please note that the reason that we had to develop two queries for each type of text was that a null in the subcategory field would cause a note to be missed when using the text by area & kind & category & subcategory query. For this reason a second query which omitted the subcategory level had to be written.

Using these queries, it is possible to limit the number of notes which are printed out using some standard reports which we have created. Also please note, that any query that brings in an entire county will also bring in the text notes and can be used when you which to print out all notes regardless of kind, category, or subcategory.

The corresponding reports to go along with these queries are as follows:
Component text inventory(no notes only categories)
Component text notes(Try me)
Data mapunit text inventory(no notes only categories)
Data mapunit text notes(Try me)
Legend text inventory
Legend text notes(Try me)
Horizon text inventory
Horizon text notes(Try me)
Mapunit text inventory
Mapunit text notes(Try me)

There is a National report for Mapunit History notes so we did not make a local report for Mapunit History notes.

Another set of queries of interest are called:

Crop yield (Component) by area and crop
Crop Yield (Data mapunit) by area and crop

These two queries can be used to bring in all the oat yields and delete all oat yields for a county if you wish to eliminate that crop.

These queries could also be used to bring in all the types of hay yields so you could globally assign them to one type of hay.

You could also bring in all types of pasture yields to globally assign to one type of pasture.

You could bring in all of one type of crop such as corn, if you wanted to edit those yields all at once and did not want the others in your way.

We hope that these queries and reports will be of some use to you. Please provide us with comments and suggestions.

Other reports that have been written have included.

NAPRA A specific report used to download data for a water quality program

AASHTO used to compare AASHTO group index, % passing 200, LL and PI. This data could be loaded into an EXCEL spreadsheet and used to verify the AASHTO group index for low, RV, and high values.

The newest edit setup that we have created is called the

Ownership and vintage of soil surveys. This edit setup is particularly useful when comparing legends or when I change permissions on data for field offices.

Please note that in the near future the legends which were called backups will be called archives. The term backup really is a misnomer for these legends. Since the MLRA-11 Regional Office will not be making regular backups of the legends they must be regarded as Archives. To retrieve these legends you must refer to them as BIL001 at this time or AIL001 once they are called archives. Each legend name starts with a z and ends with a z. If you wish to call them up, you must use the following format zadams*illinoisz for Adams County, Illinois. Or za*sz would give the same result if Adams is the only county in Illinois starting with a.

Converting the legends from the backup area types to archive area types is not a high priority so do not look for that change too soon.

To Select A County And Run A Stanard Report by Scot Haley

- Click **file** and **arrow to select** and hit **enter**
- Click on **local** (fig. 1)
- Click the **down arrow** (fig2)
- Arrow down to **mo-load major components for a survey area and click it** (fig.3)
- Click on **area, legend, mapunit, correlation** and **components** and click **apply**
- type **name of county followed by *a** (for Indiana) ie Tipton(fig.4)
- Then click **in box below** and click the **down arrow**
- Click on the **status of the survey** ie published and click **apply** (fig. 5)
- It says 1 row added click **OK**
- Then click **cancel**
- Click **options**
- Click **standard reports**
- Click **local**
- Scroll through till you find the report you want and **click on it** (fig. 6)
- Click **preview**
- If it ask for subtitle click **apply**

THERE ARE LOTS OF WAYS TO SELECT DATA. HERE ARE TWO OTHER MAIN ONES THAT I USE:

#1

- Click **file**
- Click **select**
- Click **national**
- Click **down arrow**
- Click on **area/legend/dmu by area and legend (all mu's)**
- Click on **area, legend, mapunit, correlation and data mapunit**
- Click on **apply**
- Type county name ***a**
- **Click in soil survey status**
- Click **down Arrow**
- Click on **published or whatever**

- Click **apply**

#2

- Click on **file**
- click on **select**
- Click on **local**
- Click **down arrow**
- Click on **revised MLRA k factor selection**
- Click on **horizon, component, horizon texture group, area, area type**
- Click **apply**
- In the state box put **IN***
- In the component name type **name of series**
- In tex& mod class type **the texture you want all in cap's ie SIL**
- In designation Imatches - **type Horizon layer you want ie H1, H2, H3**
- In kf Imatch box type the **k factor you want or hit * if you do not care**
- Click **apply**

******* NOTE IF YOU RUN THIS QUERY SOME OF THE STANARD REPORTS MAY NOT WORK UNLESS YOU LOAD THE RELATED INFORMATION. TO DO THIS DO THE FOLLOWING:**

- Click **view**
- Click **datamapunit**
- Click **datamapunit** again
- **Hold the shift key down and use arrow key to highlight all the selections**
- Click **file**
- Click **load related**
- Click **correlation**
-

FIGURE 1

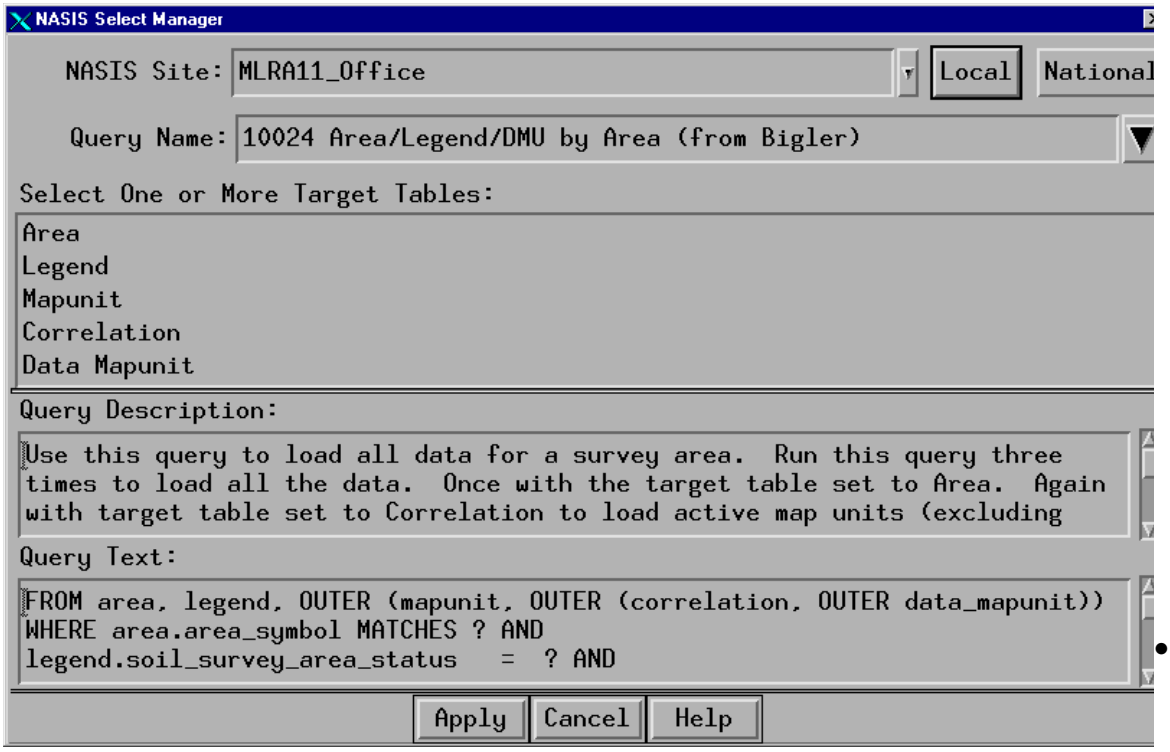


FIGURE 2

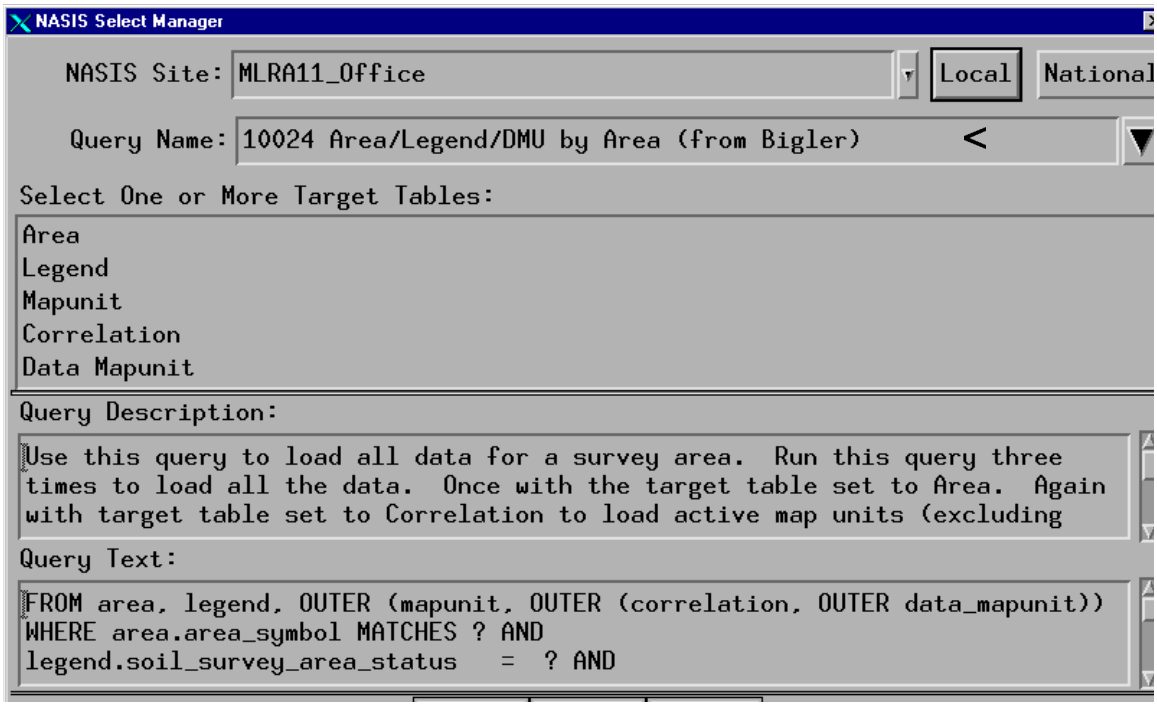


FIGURE 3

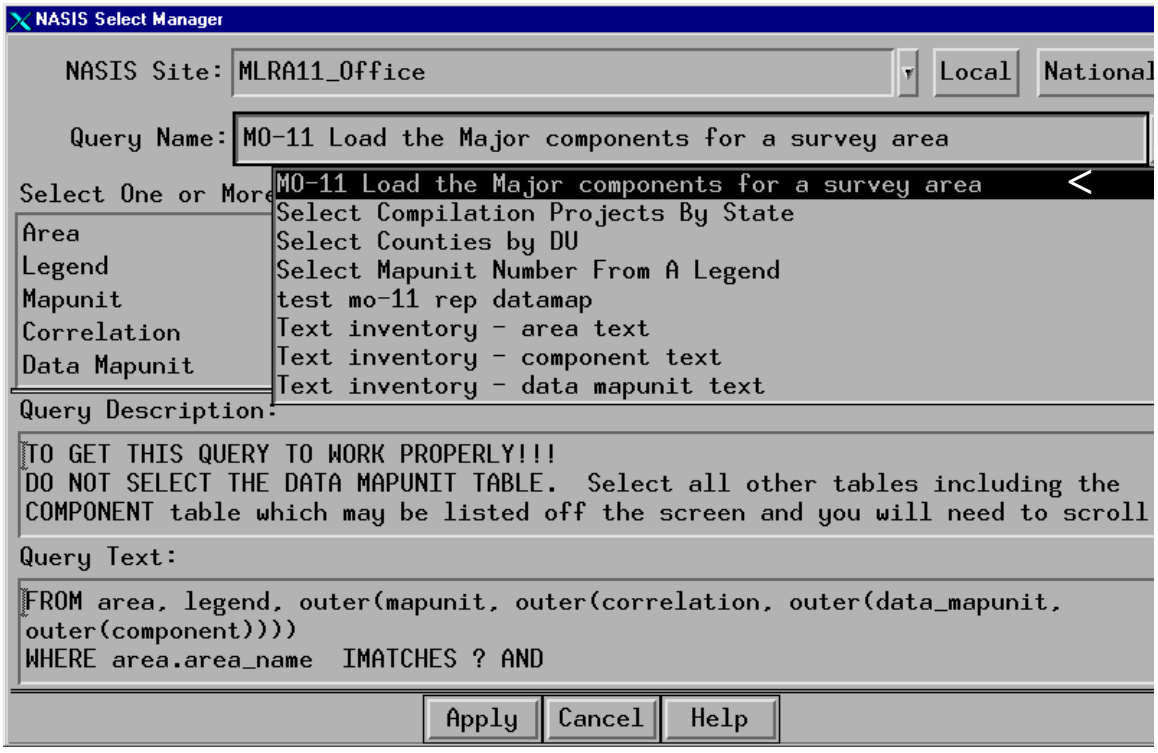


FIGURE 4

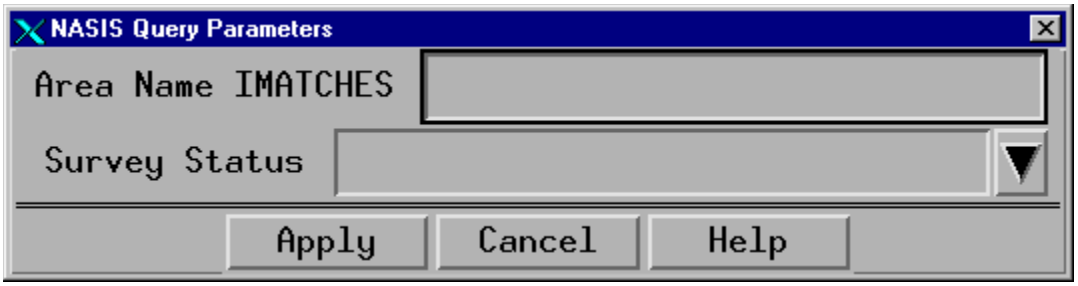
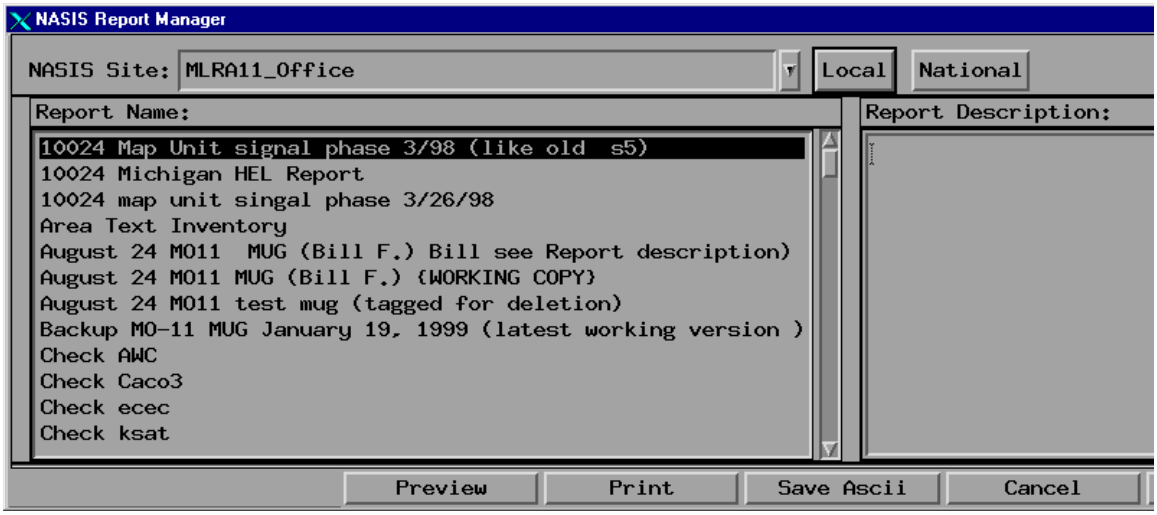


FIGURE 5

FIGURE 6


NASIS Report Manager
NASIS Site: MLRA11_Office
Local
National
Report Name:
Report Description:
10024 Map Unit signal phase 3/98 (like old s5)
10024 Michigan HEL Report
10024 map unit singal phase 3/26/98
Area Text Inventory
August 24 MO11 MUG (Bill F.) Bill see Report description)
August 24 MO11 MUG (Bill F.) (WORKING COPY)
August 24 MO11 test mug (tagged for deletion)
Backup MO-11 MUG January 19, 1999 (latest working version)
Check AWC
Check Caco3
Check ecec
Check ksat
Preview
Print
Save Ascii
Cancel

Reviewing And Retrieving National Soil Survey Laboratory Data From The *Internet* *by Charles Love*

The National Soils Data Access Facility (NSDAF) project is a multifaceted effort that will provide a mechanism, for both internal and external customers, to access, analyze, download, and report the various national soils databases. The databases in the NSDAF include the national MUIR, OSD, SC, and soil characterization databases.

The national Soil Survey Laboratory database can be viewed at Internet Site: **http://www.statlab.iastate.edu/soils/nsdaf/**

Please ***click*** on the **bold** text under each topic:

Topics 1: Soil Attribute Databases

Soil Survey Data (MUIR)
Official Soil Series Descriptions (OSD)
Soil Series Classification (SC)
National Soil Characterization Database (NSSL)

Topics 2: Database Access

Access National Soil Characterization Data On-line

Order National Soil Characterization Data on CD-ROM

Topics 3: Soil Survey Laboratory Database

Data Acquisition Method
Set Display Format
Data Use Of Research Database
Review Database Inventory List
Review User Manual

Topics 4: NATIONAL SOIL SURVEY CENTER - SOIL SURVEY LABORATORY

(Select the data by one of the following queries)
Laboratory Pedon Number
Soil Survey Sample Number
Soil Sample As Name
Soil Current Name
Area By State And County
Soil Taxonomy By Code
Soil Master Index
Major Land Resource Area
Laboratory Project Number

Topics 5: Soil Survey Laboratory

Enter 'SOIL “CURRENT” NAME' Here
Correct Format: 'Holdrege '

Series *Ipava*

```
Your "SET DISPLAY FORMAT" Request Is In ERROR:00000
System DATA_SHEET Default is Set to Characterization
Processing Will Continue For Characterization Only

You May Reset "DISPLAY FORMAT" By Returning to Main Menu
```

*** P R I M A R Y C H A R A C T E R I Z A T I O N D A T A ***

S83IL-039-015 (DE WITT COUNTY, ILLINOIS)

PRINT DATE 01/29/99

SAMPLED AS : IPAVA ; FINE, MONTMORILLONITIC, MESIC AQUIC ARGIUDOLL
REVISED TO : IPAVA ; FINE, MONTMORILLONITIC, MESIC AQUIC ARGIUDOLL

SSL - PROJECT 85P 59, (CP85IL093) DEWITT CO DB
- PEDON 85P 316, SAMPLES 85P 1517- 1519
- GENERAL METHODS 1B1A, 2A1, 2B

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NATIONAL SOIL SURVEY CENTER
SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA 68508-3866

	-1--	-2--	-3--	-4--	-5--	-6--	-7--	-8--	-9--	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-	-19-	-20-
	(- - -TOTAL - - -)(- -CLAY- -)(- -SILT- -)(- - - - - -SAND- - - - - - -)(-COARSE FRACTIONS(MM)-)(>2MM)																			
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	<- - - - - - - - - - - - - PCT OF <2MM (3A1) - - - - - - - - - - - - - ->												<- PCT OF <75MM(3B1)->						SOIL	
85P1517S	0- 18	AP	22.4	72.6	5.0		43.1	29.5	0.8	1.7	1.4	0.7	0.4	TR	TR	--		4	--	
85P1518S	46- 81	BT	40.1	59.0	0.9		39.5	19.5	0.3	0.2	0.2	0.2	--	--	--	--		1	--	
85P1519S	140-152	CG	22.6	75.0	2.4		43.9	31.1	0.8	0.8	0.6	0.2	--	--	--	--		2	--	

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	PCT	<2MM	PPM	<- PERCENT OF <2MM -->				PCT <0.4MM			<- - G/CC - - ->			CM/CM	<- - -PCT OF <2MM - ->				CM/CM	
0- 18	3.19							0.46			1.49	1.65	0.035		24.1	10.4	0.20		
46- 81	0.59							0.44			1.25	1.77	0.123		34.1	17.6	0.21		
140-152	0.16							0.50			1.45	1.64	0.042		27.1	11.3	0.23		

*** P R I M A R Y C H A R A C T E R I Z A T I O N D A T A ***

S83IL-039-015 PRINT DATE 01/29/99
SAMPLED AS : IPAVA ; FINE, MONTMORILLONITIC, MESIC AQUIC ARGIUDOLL
USDA-NRCS-NSSC-SOIL SURVEY LABORATORY ; PEDON 85P 316, SAMPLE 85P 1517- 1519

	-1--	-2--	-3--	-4--	-5--	-6--	-7--	-8--	-9--	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-	-19-	-20-
	(- NH4OAC EXTRACTABLE BASES -)					ACID-	EXTR (- - -		-CEC - - -)		AL	-BASE SAT-		CO3 AS	RES.		COND.(- - -		-PH - - -)	
	CA	MG	NA	K	SUM	ITY	AL	SUM	NH4-	BASES	SAT	SUM	NH4	CACO3	OHMS		MMHOS		CACL2	H2O
DEPTH (CM)	5B5a 6N2e	5B5a 6O2d	5B5a 6P2b	5B5a 6Q2b	BASES	6H5a	6G9a	CATS 5A3a	OAC 5A8b	+ AL 5A3b	5G1	5C3	OAC 5C1	<2MM 6E1g	/CM 8E1		/CM 8I		.01M 8C1f	8C1f
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0- 18																			6.7	7.3
46- 81																			5.7	6.2
140-152														--					7.1	7.8

ANALYSES: S= ALL ON SIEVED <2mm BASIS

Microsoft Access To Set Up And Run Queries by Scot Haley

- **Click on Microsoft access**
- **Find and open the Indiana database**
- Click on the tab that says **queries** (see fig. 1)
- Click on **new**
- click on **OK** (design view)
- Click **add** (horizon data) (fig. 2)
- **Arrow down to site data** and click **add**
- Then click **close** (fig. 3)
- **Click on the line between the tables and hit the delete key on your keyboard** (fig. 4)
- Click on the **pedonid** and hold left mouse button in the horizon data and drag the arrow over to the **pedonid** in the site data table and let go of the left mouse button. (this will make a connection between the two tables with the link between pedonid) (see fig. 5)
- Select the items you want to add to the query by using the arrow key to highlight the one you want to add to the report. Once you have one highlighted that you want to add, **click the left mouse button 2 times quickly**. This will add the item to the report below. (fig. 6)
- When you have all the items in the report you want it is time to enter criteria. Click the **criteria box** for the thing you want to select for and **type the criteria**. For example in Fig. 8 you will see that under the field series I entered Blount and under the field horizon I entered *A* as the criteria. When this is ran it will give me all the blounts that have any horizon with an A in it. Ie. AB, BA, Ap, A1, A2 ect.
- When you are done click the **X** in the upper right hand corner of the query box (fig. 7)
- It will ask you if you want to save changes click **yes**
- It will ask you for a name to save as. Enter a name and click **OK**
- Once back at screen click **open** this will run the query (fig. 9)
- If you are done you can click the **X** in the upper right hand corner of the query box
- Then click on **file**
- Then click on **Exit**
-

•

FIGURE 1

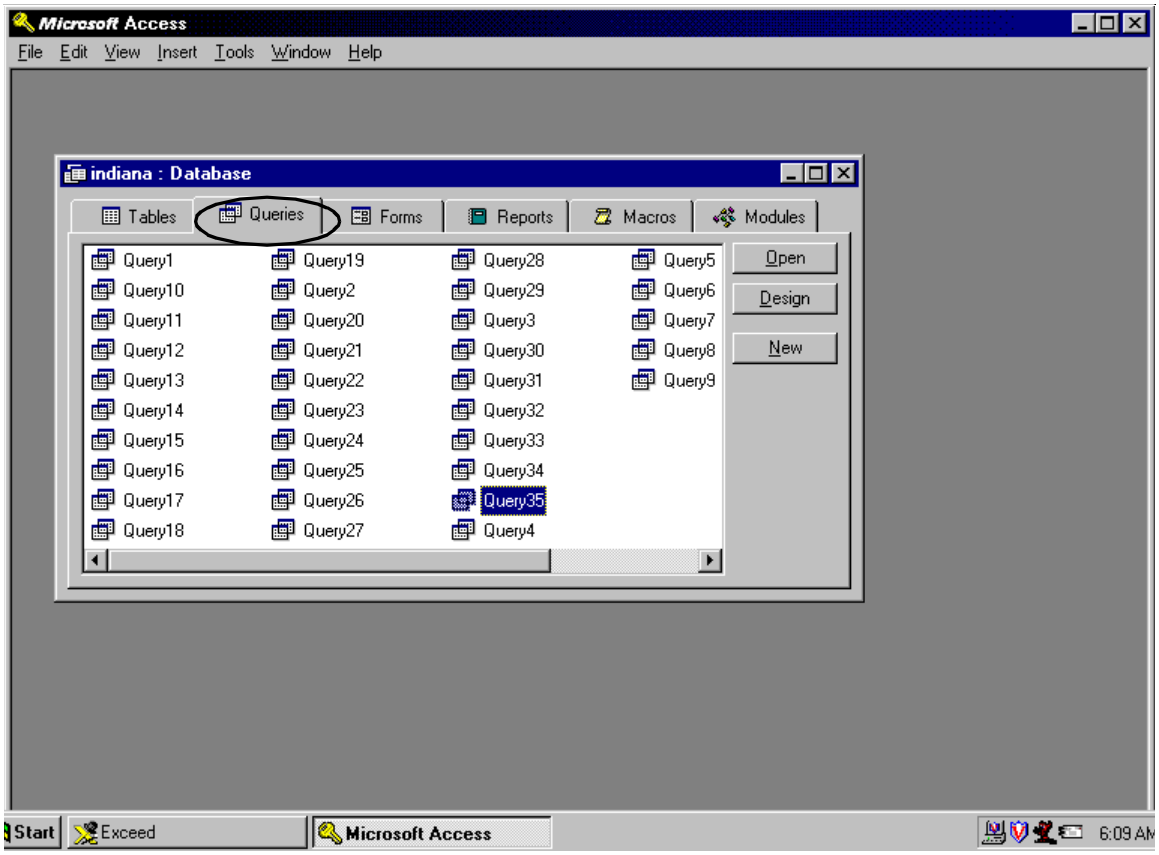


FIGURE 2

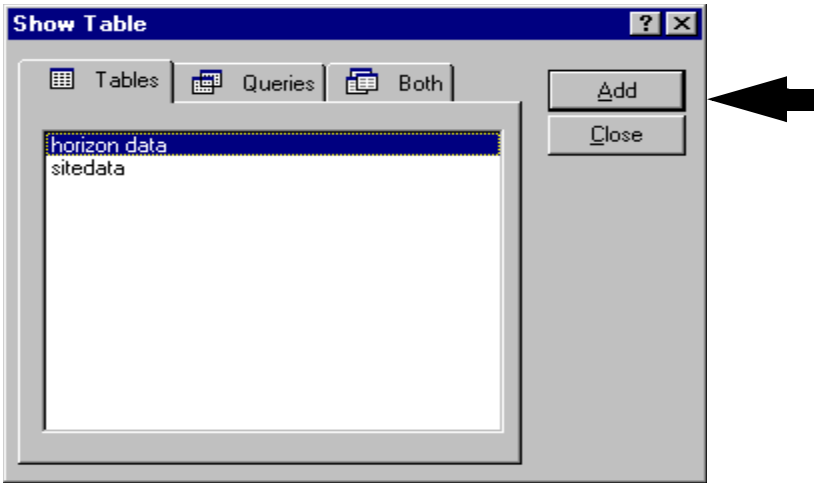
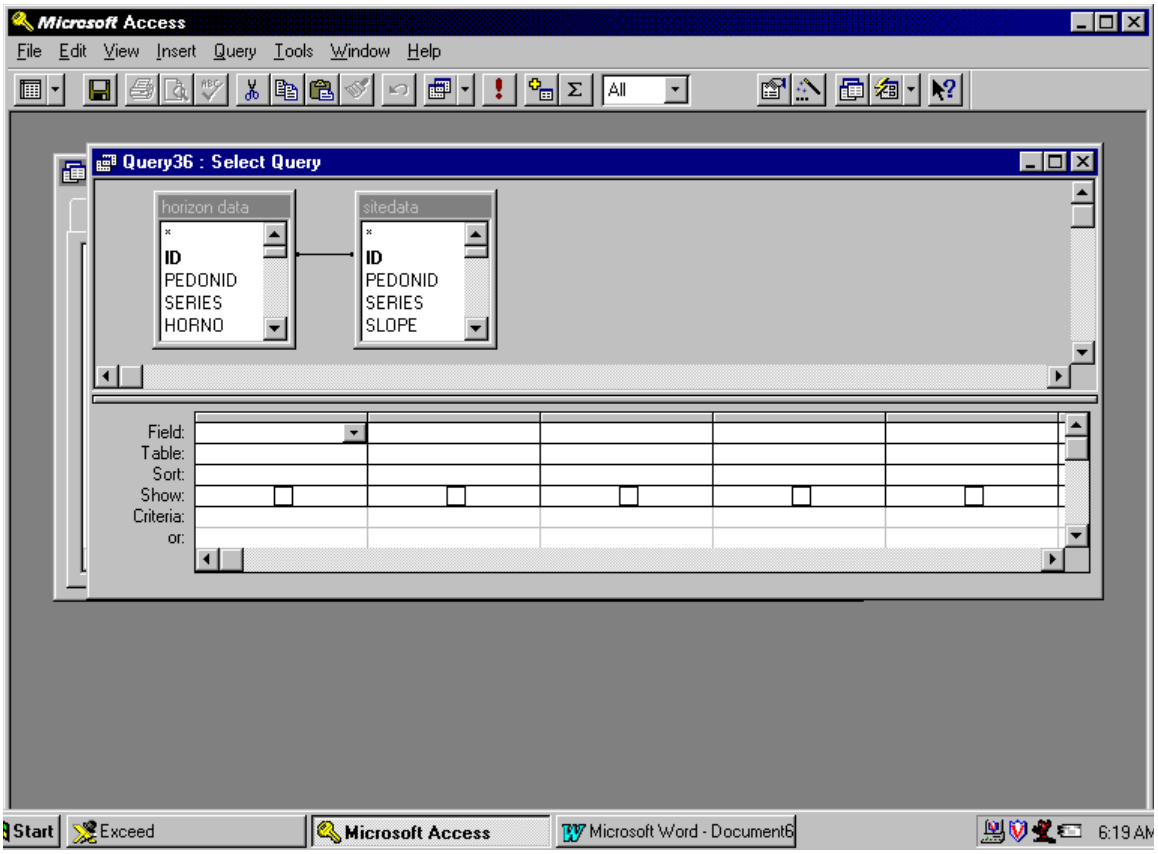


FIGURE 3


Microsoft Access
File Edit View Insert Query Tools Window Help
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Query36 : Select Query
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or:
Start
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Microsoft Access
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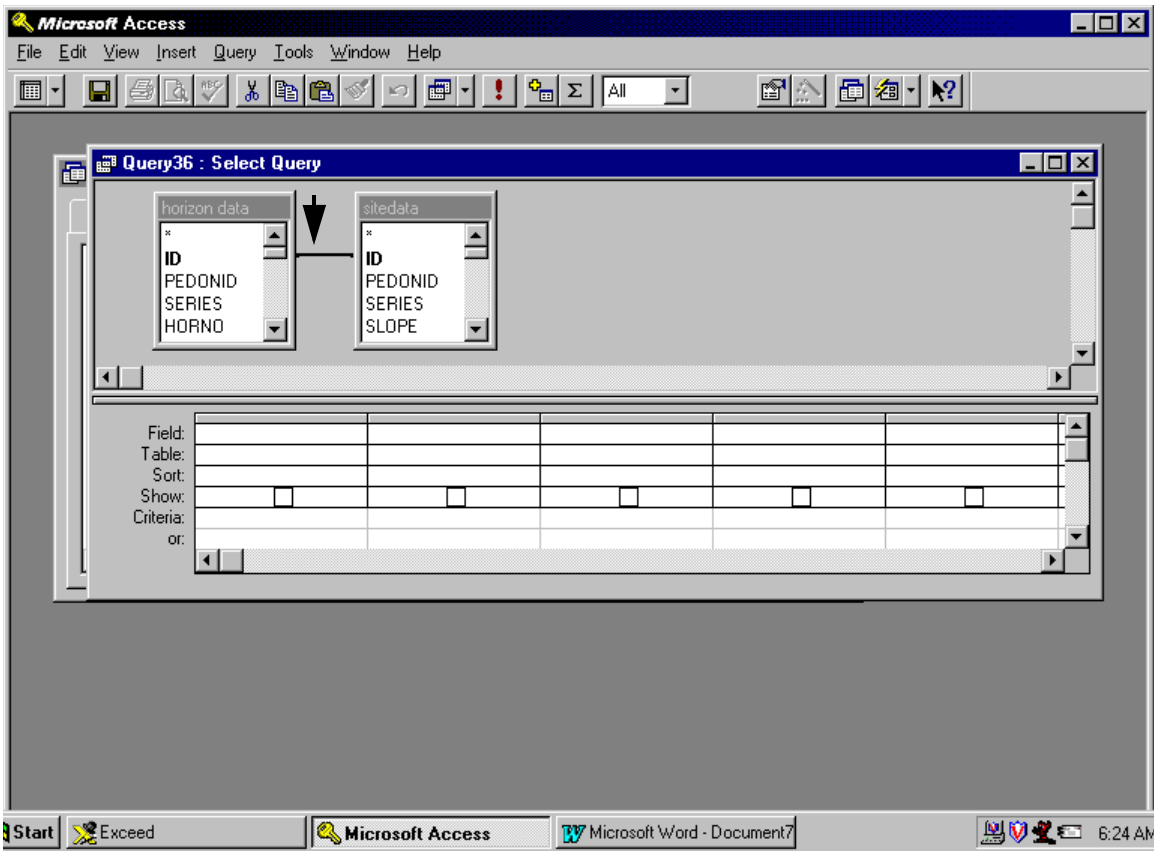
6:19 AM

FIGURE 4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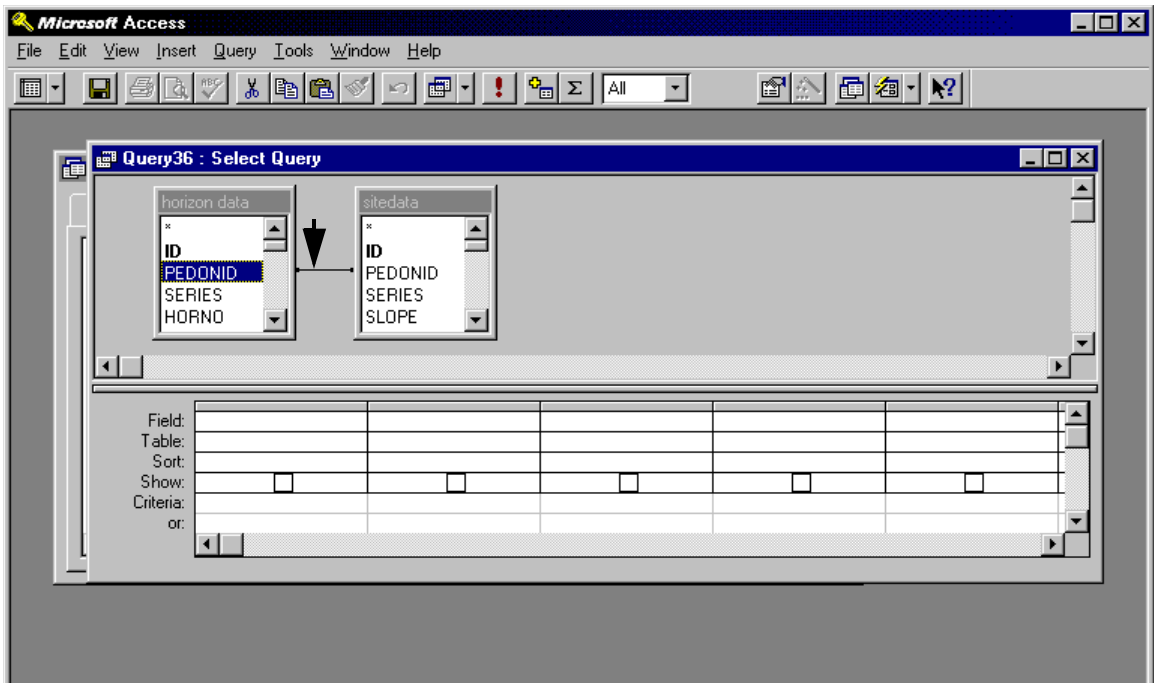
Microsoft Word - Document7
6:24 AM

Figure 5


Microsoft Access
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Query36 : Select Query
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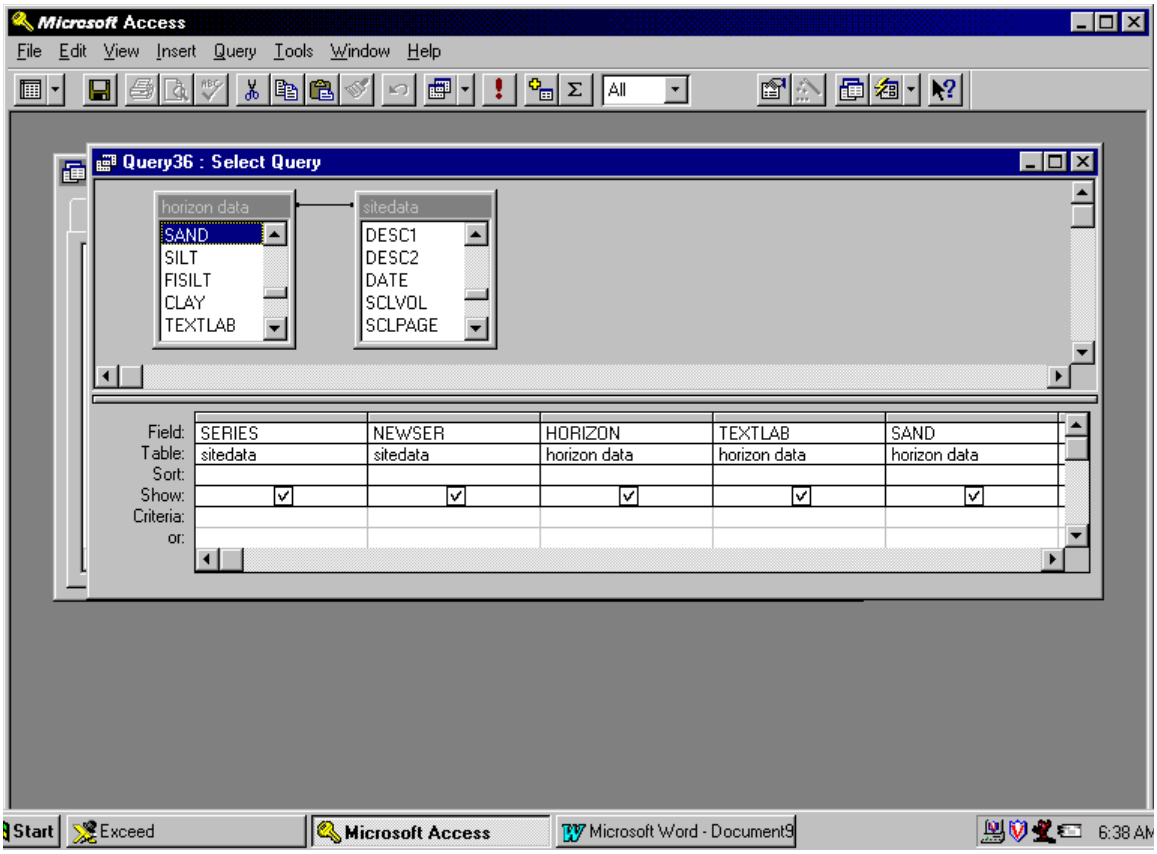
FIGURE 6


Microsoft Access
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Query36 : Select Query
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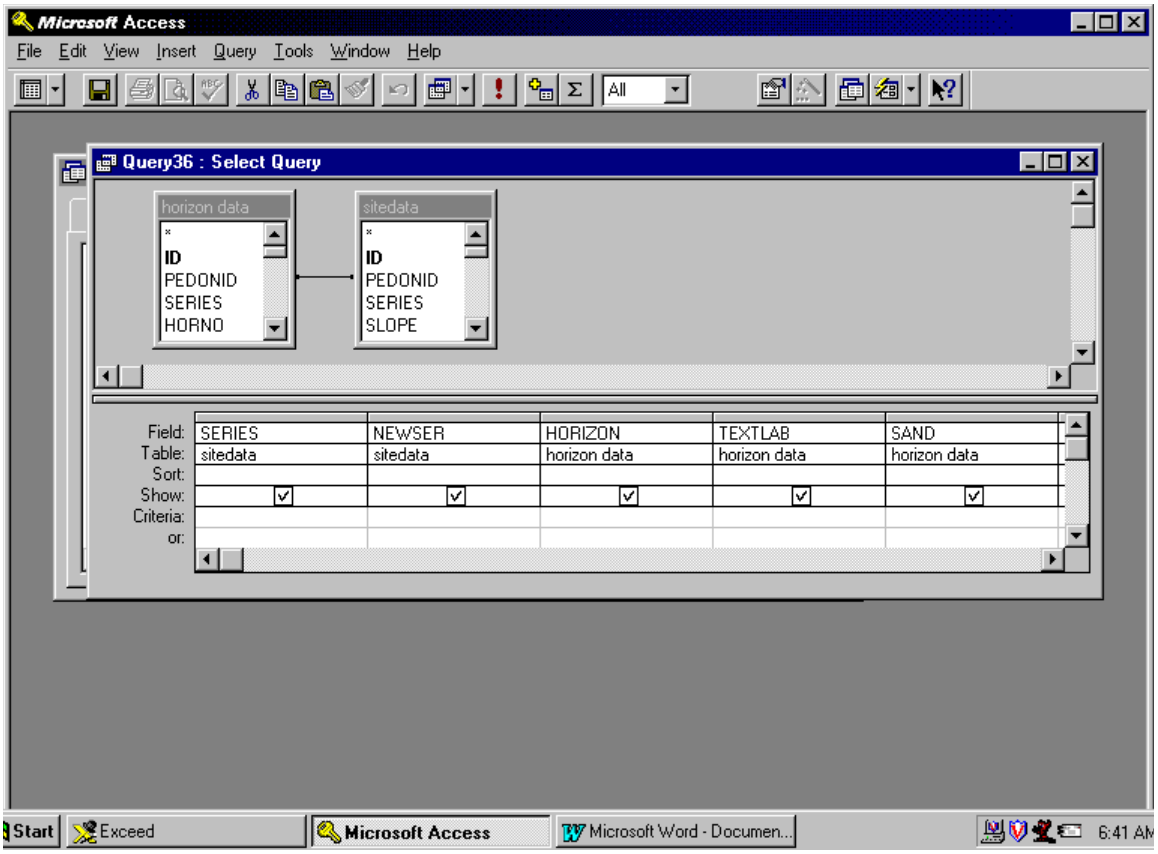
SCLPAGE
Field: SERIES NEWSER HORIZON TEXTLAB SAND
Table: sitedata sitedata horizon data horizon data horizon data
Sort:
Show:
Criteria:
or:
Start
Exceed
Microsoft Access
Microsoft Word - Document9
6:38 AM

FIGURE 7


Microsoft Access
File Edit View Insert Query Tools Window Help
All
Query36 : Select Query
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PEDONID
SERIES
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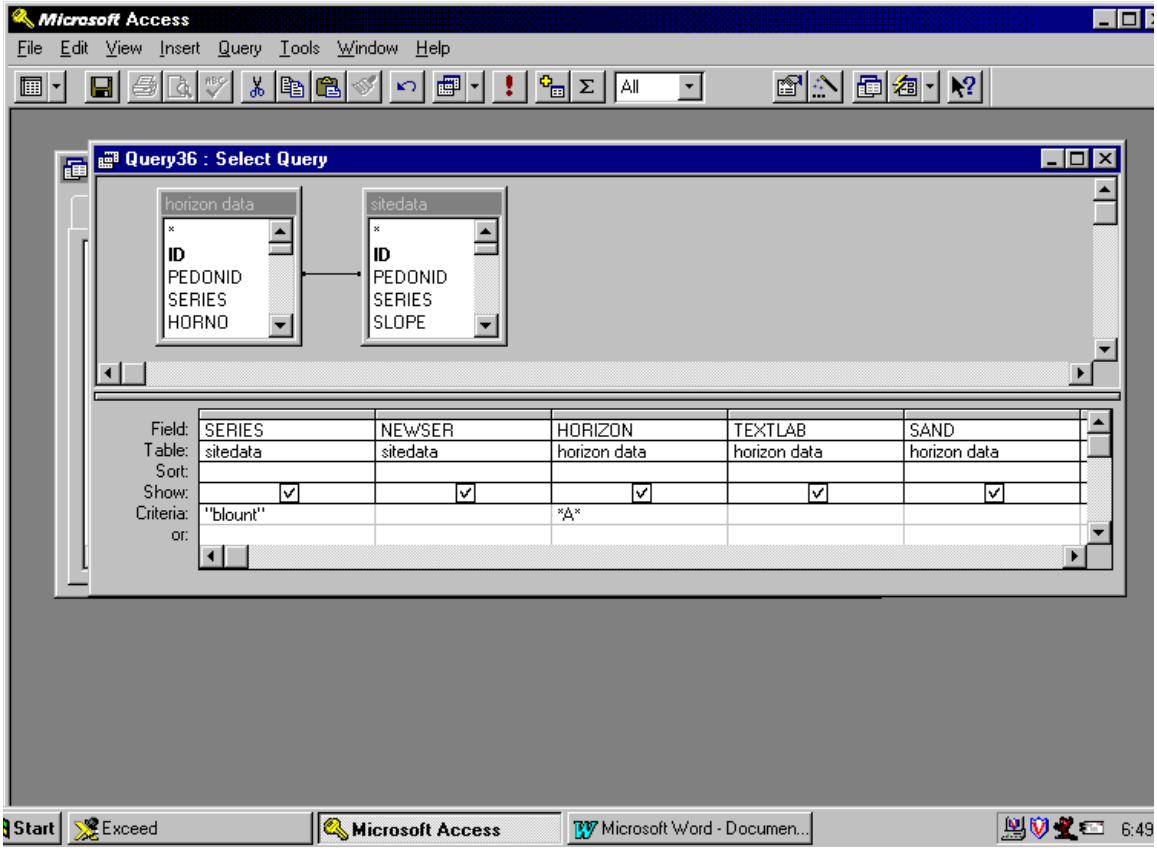
FIGURE 8


Microsoft Access
File Edit View Insert Query Tools Window Help
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Query36 : Select Query
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Criteria: "blount" *A*
or:
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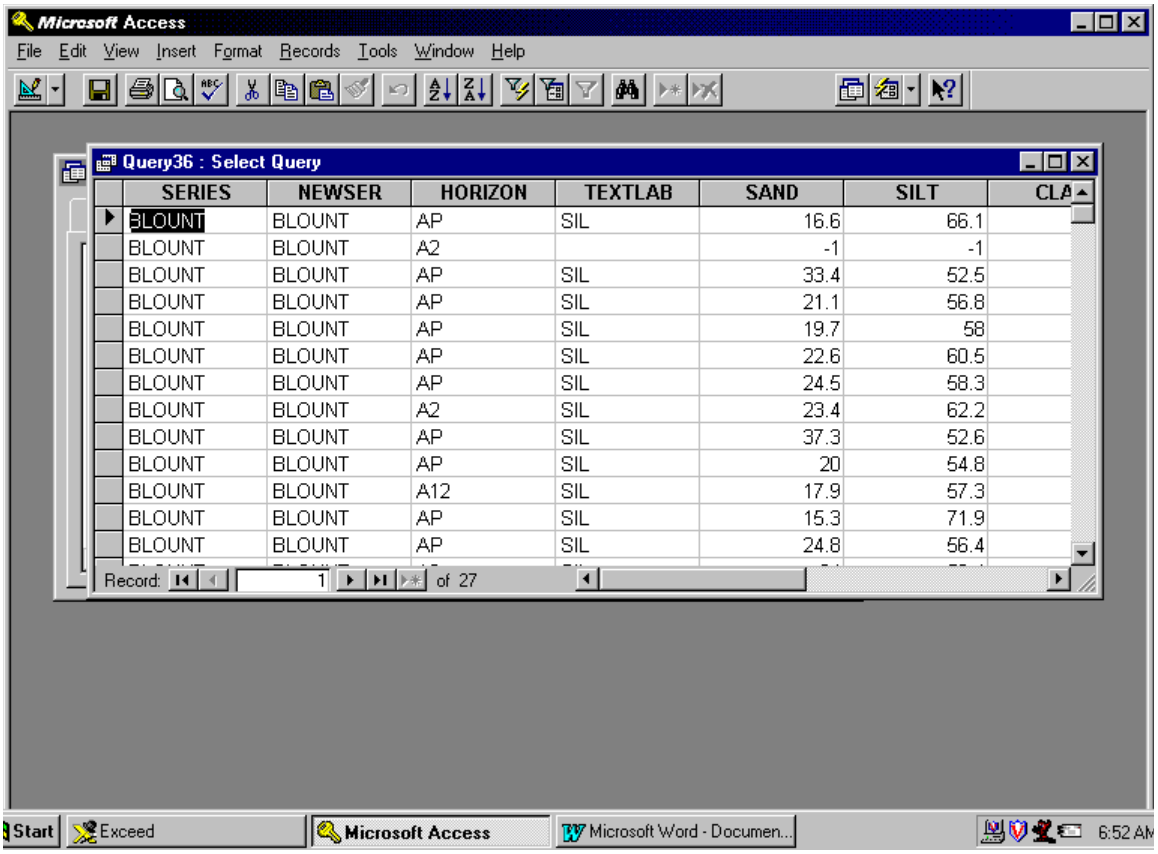
Exceed
Microsoft Access
Microsoft Word - Documen...
6:49

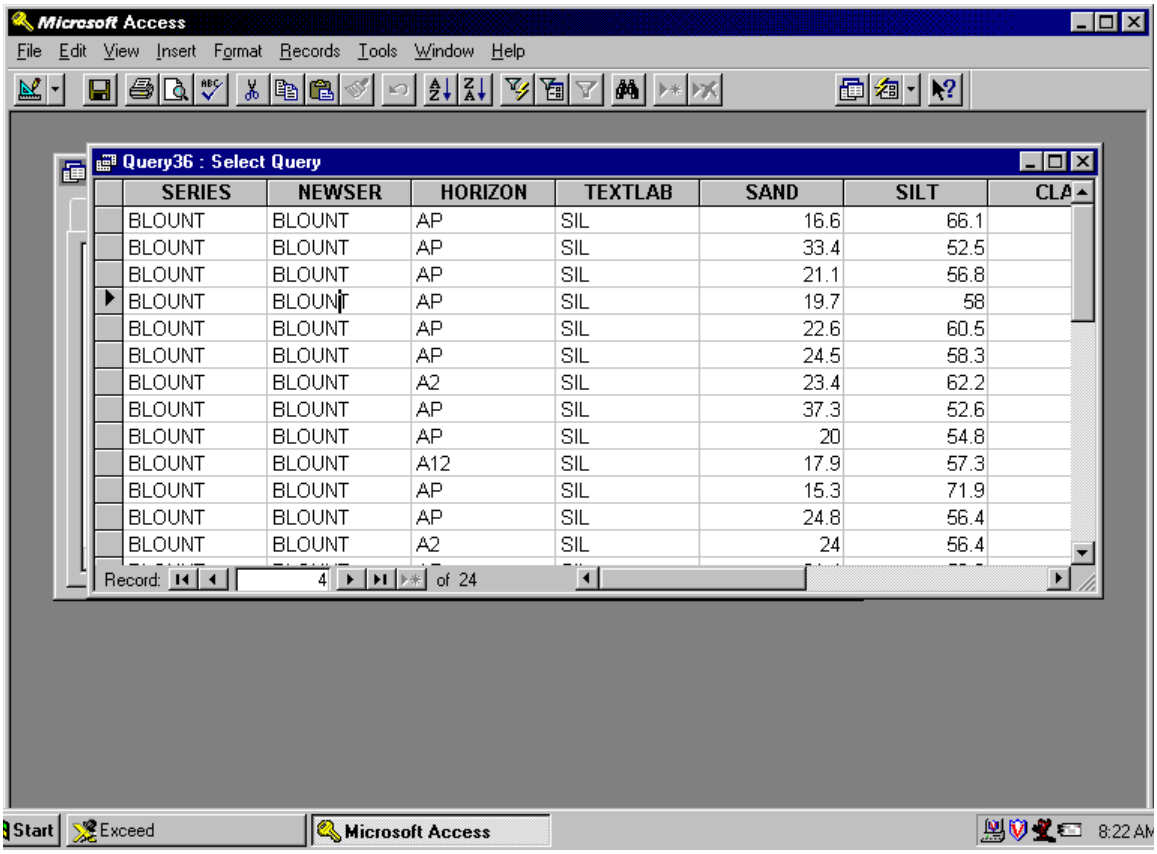
Figure 9


Microsoft Access
File Edit View Insert Format Records Tools Window Help
Query36 : Select Query
SERIES NEWSER HORIZON TEXTLAB SAND SILT CLA
BLOUNT BLOUNT AP SIL 16.6 66.1
BLOUNT BLOUNT A2 -1 -1
BLOUNT BLOUNT AP SIL 33.4 52.5
BLOUNT BLOUNT AP SIL 21.1 56.8
BLOUNT BLOUNT AP SIL 19.7 58
BLOUNT BLOUNT AP SIL 22.6 60.5
BLOUNT BLOUNT AP SIL 24.5 58.3
BLOUNT BLOUNT A2 SIL 23.4 62.2
BLOUNT BLOUNT AP SIL 37.3 52.6
BLOUNT BLOUNT AP SIL 20 54.8
BLOUNT BLOUNT A12 SIL 17.9 57.3
BLOUNT BLOUNT AP SIL 15.3 71.9
BLOUNT BLOUNT AP SIL 24.8 56.4
Record: 1 of 27
Start
Exceed
Microsoft Access
Microsoft Word - Documen...
6:52 AM

To Transport A Query From Access To Excel by Scot Haley

- Once you are looking at the results of a query click **edit** and **arrow to select all records** and hit **enter**(fig. 1)
- Then click **edit** and **arrow down to copy** and hit **enter**
- Then shrink it down by clicking the _ in the upper right hand corner (fig. 2)
- Then click on **microsoft excel** (fig. 3)
- Make sure cursor is in top left hand corner (fig.4) and click **edit arrow down to paste** and hit **enter**
- This will look like figure 5
- NOW IF YOU WANT TO CALCULATE AVERAGES MAX'S OR MIN'S YOU DO THE FOL-LOWING
- Click in the **box** below your line of data
- Click **insert** and **arrow down to function** and hit **enter**(fig. 6)
- **Highlight average** and click **next**
- Then at the fx line (fig. 7) **type the columns headings you want separated by a :** ie E2:E25
- The click **finish**
- If you want the max. or min. you would use the same process as you would above except chose max. or min. instead of average
- When finished click **file** and **arrow down to exit** and hit **enter**
- It will ask you if you want to save hit **yes** and type name then click **save**

FIGURE 1



SERIES	NEWSER	HORIZON	TEXTLAB	SAND	SILT	CLA
BLOUNT	BLOUNT	AP	SIL	16.6	66.1	
BLOUNT	BLOUNT	AP	SIL	33.4	52.5	
BLOUNT	BLOUNT	AP	SIL	21.1	56.8	
BLOUNT	BLOUNT	AP	SIL	19.7	58	
BLOUNT	BLOUNT	AP	SIL	22.6	60.5	
BLOUNT	BLOUNT	AP	SIL	24.5	58.3	
BLOUNT	BLOUNT	A2	SIL	23.4	62.2	
BLOUNT	BLOUNT	AP	SIL	37.3	52.6	
BLOUNT	BLOUNT	AP	SIL	20	54.8	
BLOUNT	BLOUNT	A12	SIL	17.9	57.3	
BLOUNT	BLOUNT	AP	SIL	15.3	71.9	
BLOUNT	BLOUNT	AP	SIL	24.8	56.4	
BLOUNT	BLOUNT	A2	SIL	24	56.4	

Figure 2

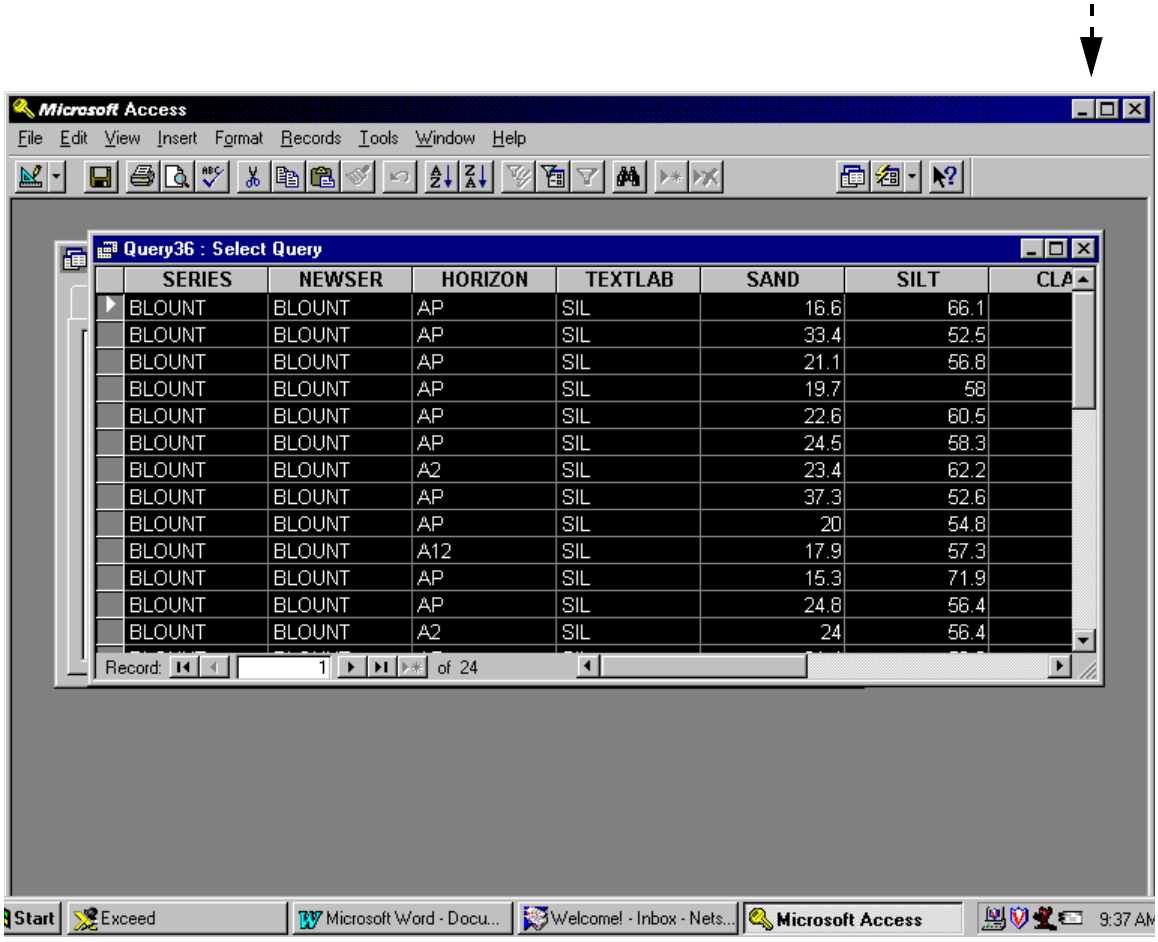

Microsoft Access
File Edit View Insert Format Records Tools Window Help
Query36 : Select Query
SERIES NEWSER HORIZON TEXTLAB SAND SILT CLA
BLOUNT BLOUNT AP SIL 16.6 66.1
BLOUNT BLOUNT AP SIL 33.4 52.5
BLOUNT BLOUNT AP SIL 21.1 56.8
BLOUNT BLOUNT AP SIL 19.7 58
BLOUNT BLOUNT AP SIL 22.6 60.5
BLOUNT BLOUNT AP SIL 24.5 58.3
BLOUNT BLOUNT A2 SIL 23.4 62.2
BLOUNT BLOUNT AP SIL 37.3 52.6
BLOUNT BLOUNT AP SIL 20 54.8
BLOUNT BLOUNT A12 SIL 17.9 57.3
BLOUNT BLOUNT AP SIL 15.3 71.9
BLOUNT BLOUNT AP SIL 24.8 56.4
BLOUNT BLOUNT A2 SIL 24 56.4
Record: 1 of 24
Start
Exceed
Microsoft Word - Docu...
Welcome! - Inbox - Nets...
Microsoft Access
9:37 AM

Figure 3

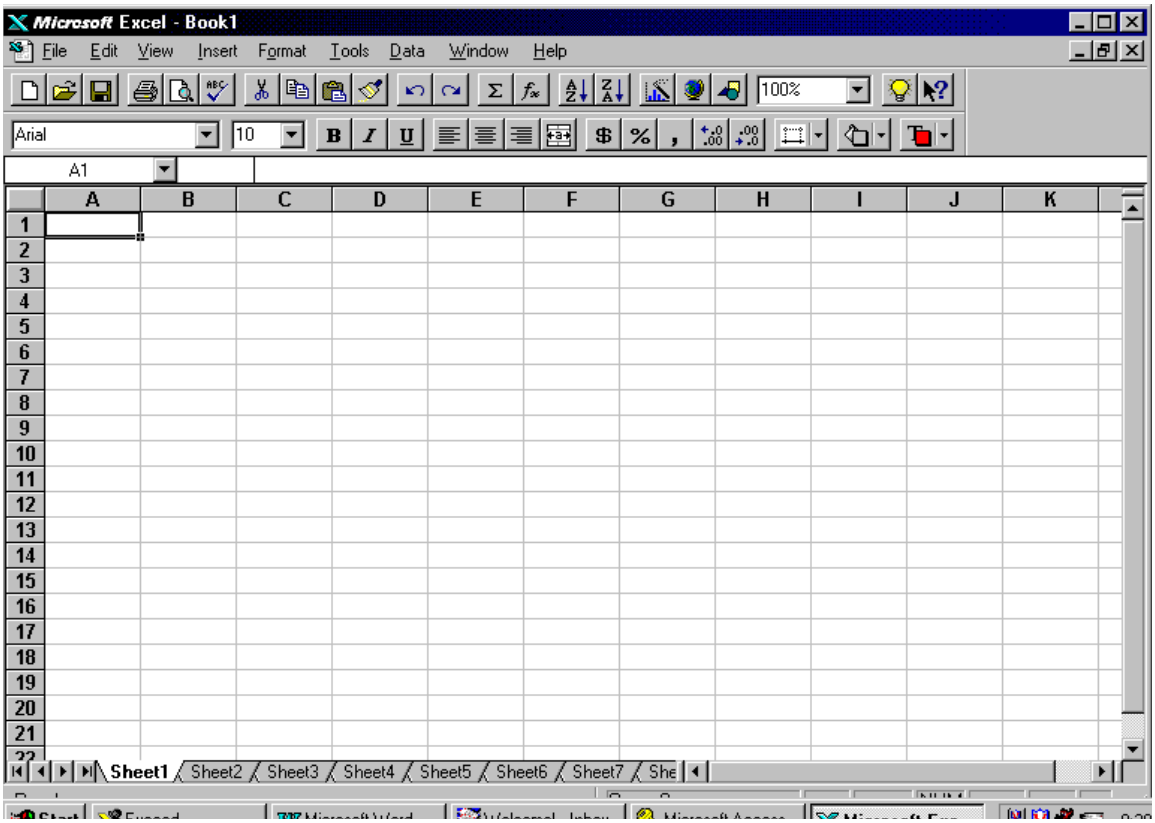

Microsoft Excel - Book1
File Edit View Insert Format Tools Data Window Help
Arial
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Figure 4

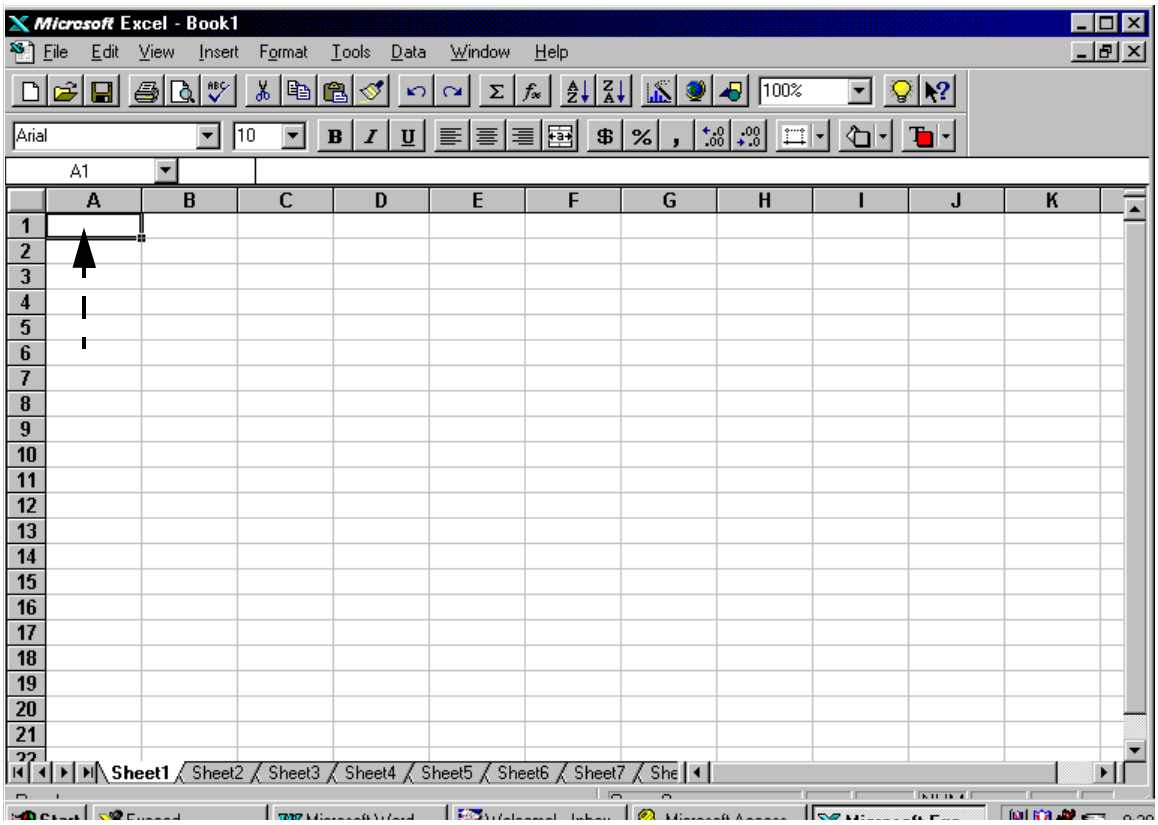
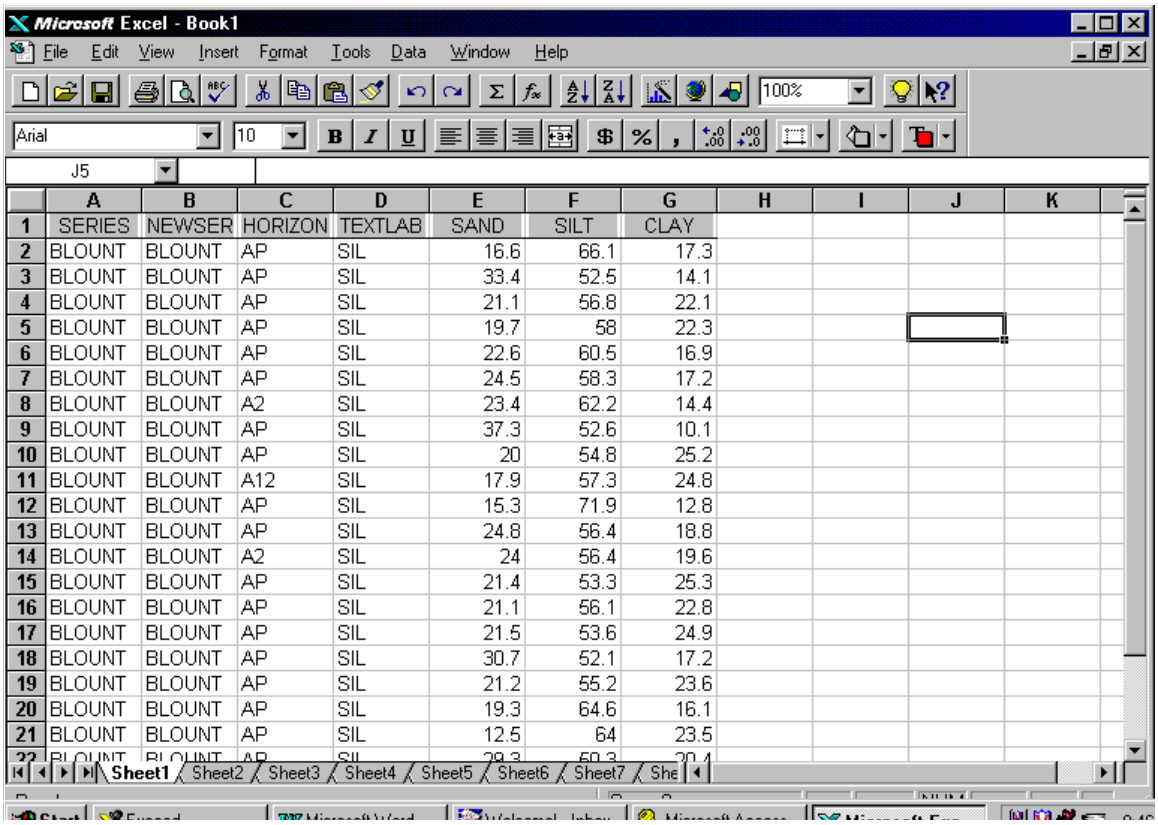

Microsoft Excel - Book1
File Edit View Insert Format Tools Data Window Help
Arial
10
A1
Sheet1 Sheet2 Sheet3 Sheet4 Sheet5 Sheet6 Sheet7

Figure 5



Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

Arial 10 100%

J5

	A	B	C	D	E	F	G	H	I	J	K
1	SERIES	NEWSER	HORIZON	TEXTLAB	SAND	SILT	CLAY				
2	BLOUNT	BLOUNT	AP	SIL	16.6	66.1	17.3				
3	BLOUNT	BLOUNT	AP	SIL	33.4	52.5	14.1				
4	BLOUNT	BLOUNT	AP	SIL	21.1	56.8	22.1				
5	BLOUNT	BLOUNT	AP	SIL	19.7	58	22.3				
6	BLOUNT	BLOUNT	AP	SIL	22.6	60.5	16.9				
7	BLOUNT	BLOUNT	AP	SIL	24.5	58.3	17.2				
8	BLOUNT	BLOUNT	A2	SIL	23.4	62.2	14.4				
9	BLOUNT	BLOUNT	AP	SIL	37.3	52.6	10.1				
10	BLOUNT	BLOUNT	AP	SIL	20	54.8	25.2				
11	BLOUNT	BLOUNT	A12	SIL	17.9	57.3	24.8				
12	BLOUNT	BLOUNT	AP	SIL	15.3	71.9	12.8				
13	BLOUNT	BLOUNT	AP	SIL	24.8	56.4	18.8				
14	BLOUNT	BLOUNT	A2	SIL	24	56.4	19.6				
15	BLOUNT	BLOUNT	AP	SIL	21.4	53.3	25.3				
16	BLOUNT	BLOUNT	AP	SIL	21.1	56.1	22.8				
17	BLOUNT	BLOUNT	AP	SIL	21.5	53.6	24.9				
18	BLOUNT	BLOUNT	AP	SIL	30.7	52.1	17.2				
19	BLOUNT	BLOUNT	AP	SIL	21.2	55.2	23.6				
20	BLOUNT	BLOUNT	AP	SIL	19.3	64.6	16.1				
21	BLOUNT	BLOUNT	AP	SIL	12.5	64	23.5				
22	BLOUNT	BLOUNT	AP	SIL	29.3	50.3	20.4				

Sheet1 Sheet2 Sheet3 Sheet4 Sheet5 Sheet6 Sheet7 She

Figure 6

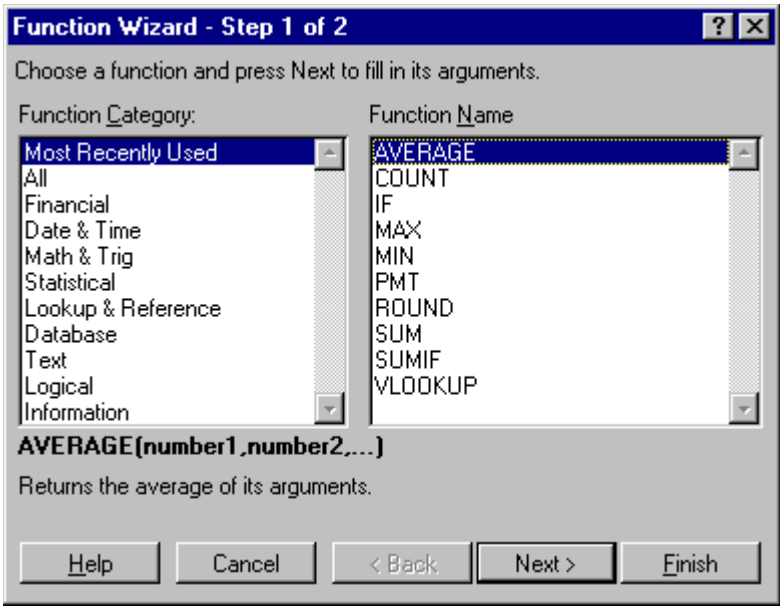
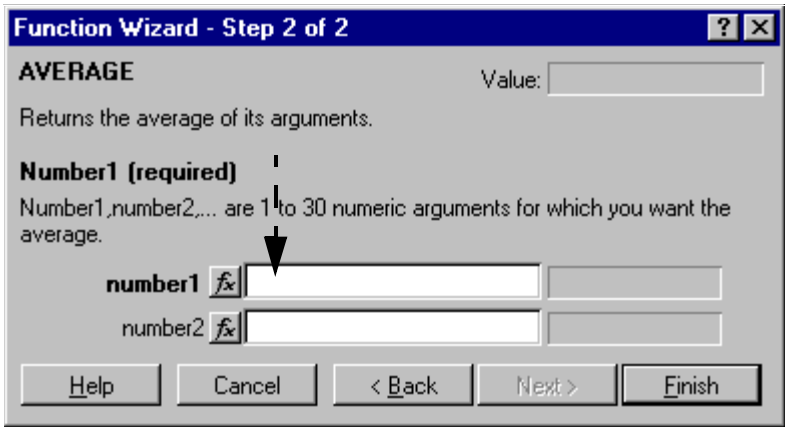


Figure 7



To print a report out of FOCS by Scot Haley

Log on

- At the menu type **f** for focs
- At the focs menu arrow to **Technical support - FOTG** and hit **enter** (Fig. 1)
- At next box arrow to **sec. II** and hit **return** (Fig. 1)
- At next box hit **enter** on **soils** (Fig. 1)
- At next box arrow to **non client soil report** and hit **enter** (Fig. 2)

NOTE READ THE FUNCTION KEYS ON THE BOTTOM OF SCREEN

- hit **F10** menue
- Hit **enter** (create group)
- At Rpt group name **type anything you want** then hit **enter** (Fig. 3)
- At Rpt group desc **type anything you want** then hit **enter** (Fig. 3)
- At report name hit **F2** for choics list (Fig. 3)
- **Arrow to one you want** and hit **enter**
- hit **F5** to save and exit
- When back to menu hit **F7** to go to other side
- Hit **F10** to get to menu
- Hit **enter** on **create new group**
- At Mu group name **type whatever you want** and hit **enter (**Fig. 4)
- At Mu group desc **type whatever you want** and hit **enter (**Fig. 4)
- At state hit **F2** to get list **(**Fig. 4)
- **Arrow to IN** hit **return (**Fig. 4)
- At ssa hit **F2** to get choice list **(**Fig. 4)
- **arrow to county you want** and hit **enter (**Fig. 4)
- At symbol hit **F2** to get list **(**Fig. 4)
- **Use arrow key to move to the unit** and **use the space bar to mark the ones you want (**Fig. 4)
- Then hit **F5** to process **(**Fig. 4)
- Then hit **F5** to save and exit
- When back at screen **hit space bar to mark the data set you want**
- Hit **F7** to get to the other region
- Hit the **space bar to mark the report you want to run**
- Hit **F10** to get to the menu
- **Arrow over to reports**

- **Arrow down to print options** and hit **enter**
- **Use space bar to chose file or printer** and hit **return**
- Hit **F5** to save and exit
- Hit **F10** to go to menu
- **Arrow over to reports**
- **Arrow down to print reports and hit enter**
- Type **8**
- Hit **yes**
- To exit hit **F5** save and exit
- Then **Esc Esc**
- Then **Esc Esc**
- Then **Esc Esc**
- **Arrow over to exit** and hit **enter**

Figure 1

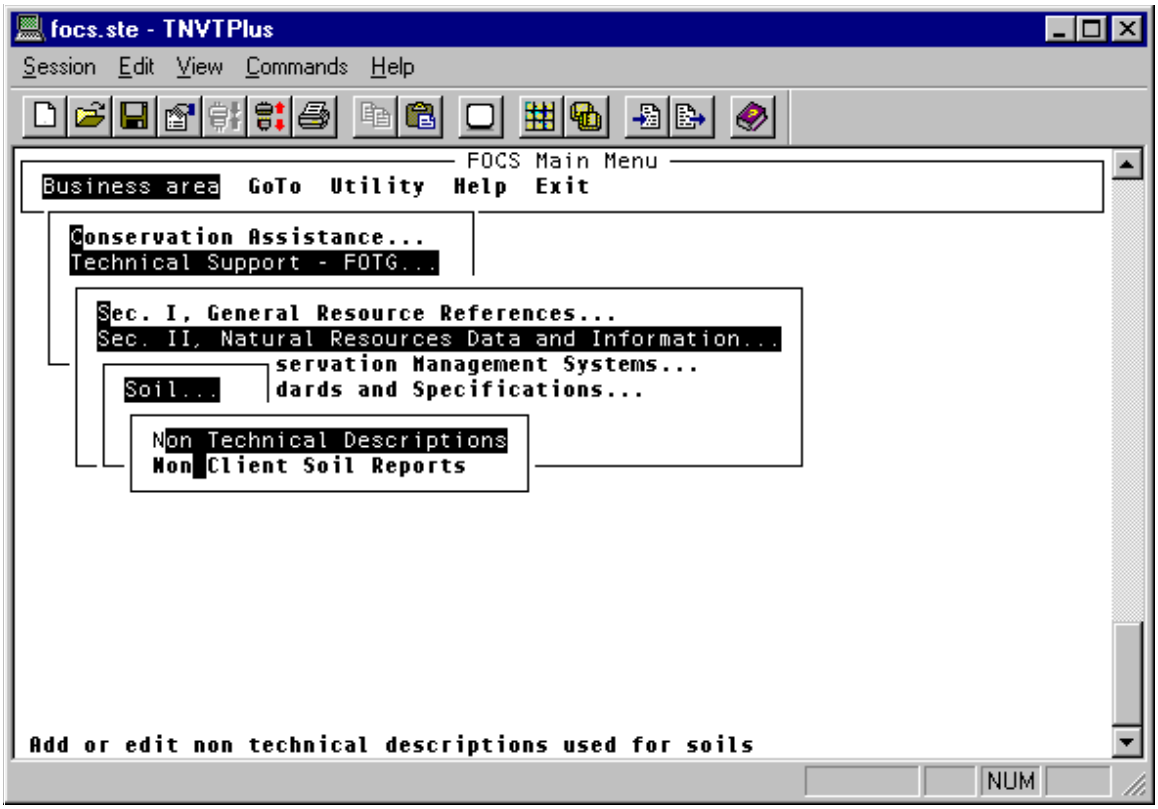
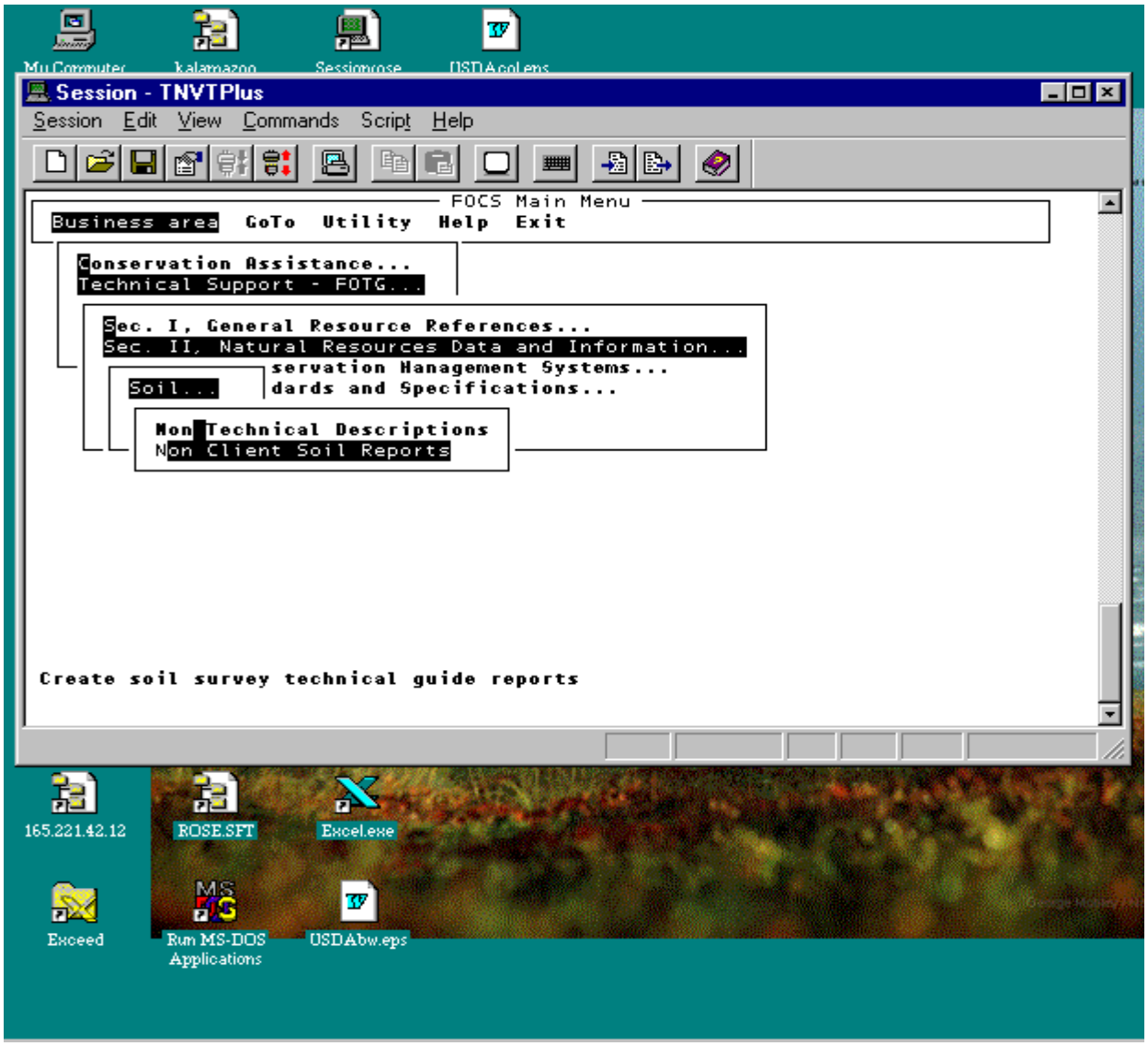

focs.ste - TNVTPlus
Session Edit View Commands Help
FOCS Main Menu
Business area GoTo Utility Help Exit
Conservation Assistance...
Technical Support - FOTG...
Sec. I, General Resource References...
Sec. II, Natural Resources Data and Information...
servation Management Systems...
Soil...
dards and Specifications...
Non Technical Descriptions
Non Client Soil Reports
Add or edit non technical descriptions used for soils
NUM

Figure 2


Session - TNVTPlus
Session Edit View Commands Script Help
FOCS Main Menu
Business area GoTo Utility Help Exit
Conservation Assistance...
Technical Support - FOTG...
Sec. I, General Resource References...
Sec. II, Natural Resources Data and Information...
servation Management Systems...
Soil...
dards and Specifications...
Non Technical Descriptions
Non Client Soil Reports
Create soil survey technical guide reports
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Excel.exe
Exceed
Run MS-DOS Applications
USDAbw.eps

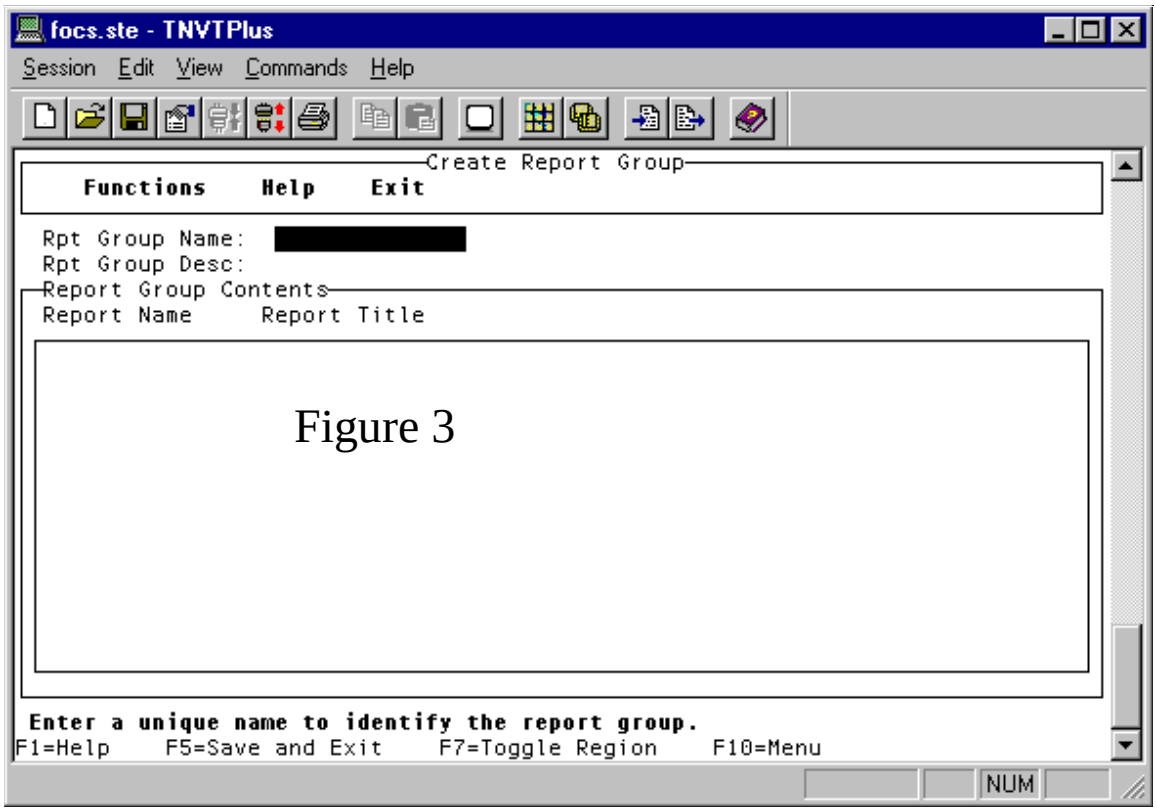

focs.ste - TNVTPlus
Session Edit View Commands Help
Create Report Group
Functions Help Exit
Rpt Group Name:
Rpt Group Desc:
Report Group Contents
Report Name Report Title
Enter a unique name to identify the report group.
F1=Help F5=Save and Exit F7=Toggle Region F10=Menu
NUM

Figure 3

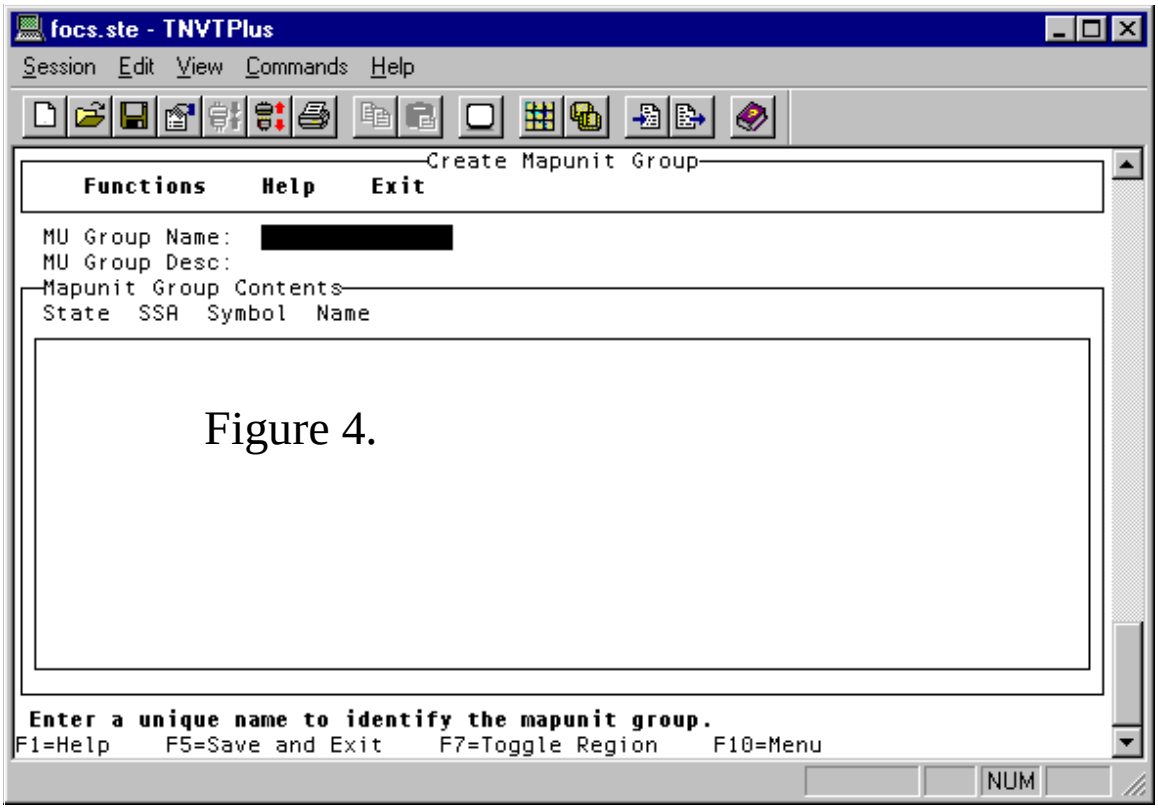

focs.ste - TNVTPlus
Session Edit View Commands Help
Create Mapunit Group
Functions Help Exit
MU Group Name:
MU Group Desc:
Mapunit Group Contents
State SSA Symbol Name
Enter a unique name to identify the mapunit group.
F1=Help F5=Save and Exit F7=Toggle Region F10=Menu
NUM

Figure 4.

How Do We Implement Pedon Coding in NASIS and UNIX by Mike Wigginton

Pedon 3.6-UNIX
Still the official pedon entry program. It is supported but no further development is taking place.
Problems with:
-activity classes
-redox features

Pedon Description for Windows Version 1.3
April 1997 designed for Windows 3x and Access 2.0, Tom Reinsch. Tom created this on his own but doesn't know if there will be any future development or support. It is based on the Pedon 3.6 model so it has the same problems with activity classes, redox features, etc.

Ongoing experiments
-MO 12 or 13 with field data recorders
-Iowa with apple Newton's
-Montana with Reinsch program and the Hammerhead
-MO 9 has something going with the Reinsch program

NASIS 4.0.2
Tom Reinsch said NASIS was never intended as a data entry interface but Russ Kelsea says that we will be imputing data directly into NASIS. From the state office this is feasible right now but there is some question about the speed factor from field office locations. Presently entering pedons is cumbersome although it can be made easier through "edit setup" or getting the columns in the same order as our pedon observation recordings. One advantage is that you don't have to enter codes but rather there are choice boxes to choose the terminology from. The other day, nationwide, there were about 90 pedons with at least something entered. There is probably some effort needed to ensure that everyone is entering the data in the same way.

You can enter activity class and redox features, etc. The printout is similar to the output from Pedon 3.6, although the redox features, etc. are in the proper order. This can be formatted by the MO and although all data fields might be filled, all the narrative does not have to print out. Transect number can be found in NASIS. Supposedly transects can be entered as well but you have to have an association of sites.

Nearly 40 new database tables are being added to NASIS to provide storage for Site and Pedon data. (See Pedon and Site data table structure diagram). The Site data model is adapted from the site information in the current Pedon database, with extensions for other site based inventory data, such as range or woodland. The Pedon data model includes the remaining attributes collected by the Pedon system. Conversion of data from the Pedon system to NASIS will not immediately be available. No completion date known for the conversion of PEDON files

already imputed. There are 8,000 pedons in DOS format backlogged for entry into NASIS in addition to UNIX data.

Questions for further discussion

-Can we expect an official data entry program for pedons and transects (field data recorders, etc.) or are we tied to entering data directly into NASIS?

-When can we expect to have the backlog of pedons that were already entered in the PEDON program downloaded into NASIS?

-What kind of time frame is there for linking lab data to NASIS? (national data/state data)

Hints for entering pedons into NASIS by Bennie Clark

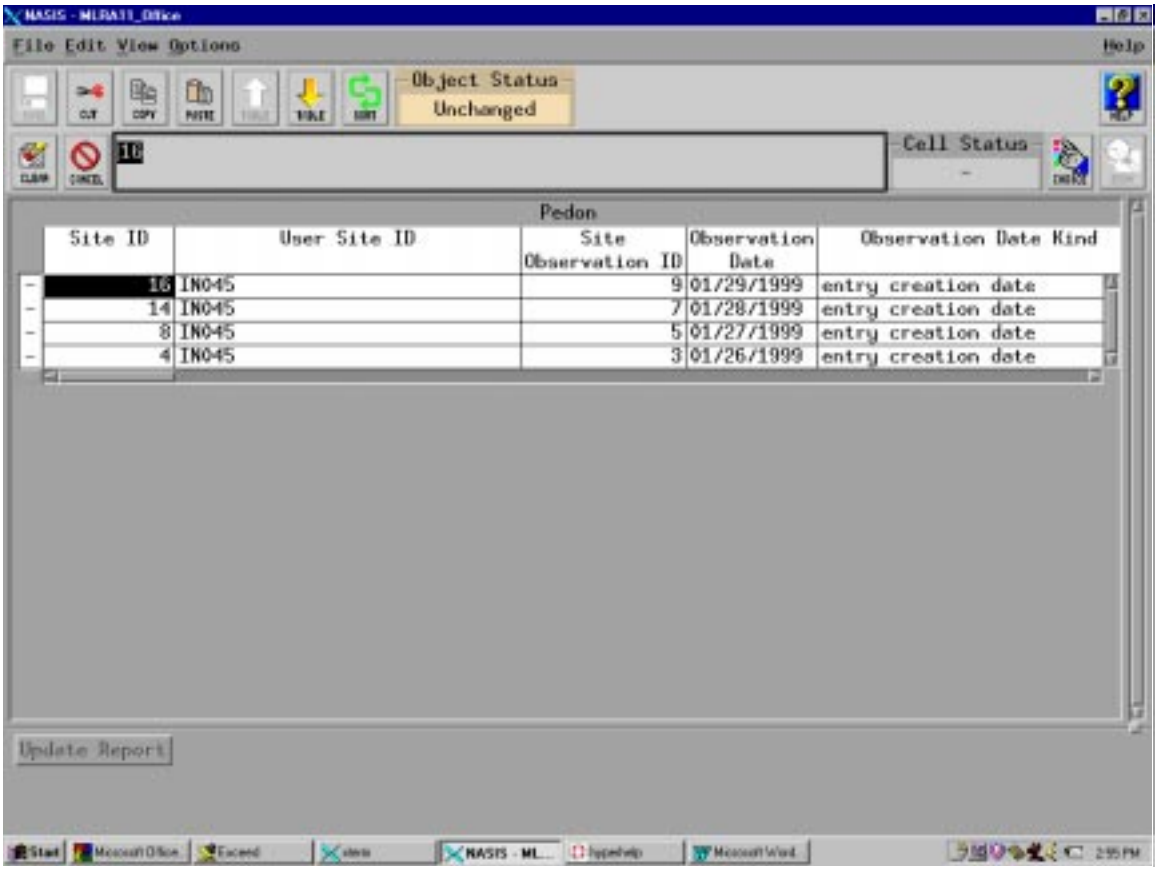
The site, pedon and site association objects contain numerous tables for entering and maintaining site and point data in NASIS. These notes offer some hints in defining a new site and adding a pedon to the site.

To start session
File>Select>National>Site by user site ID
Target Tables = pedon + site

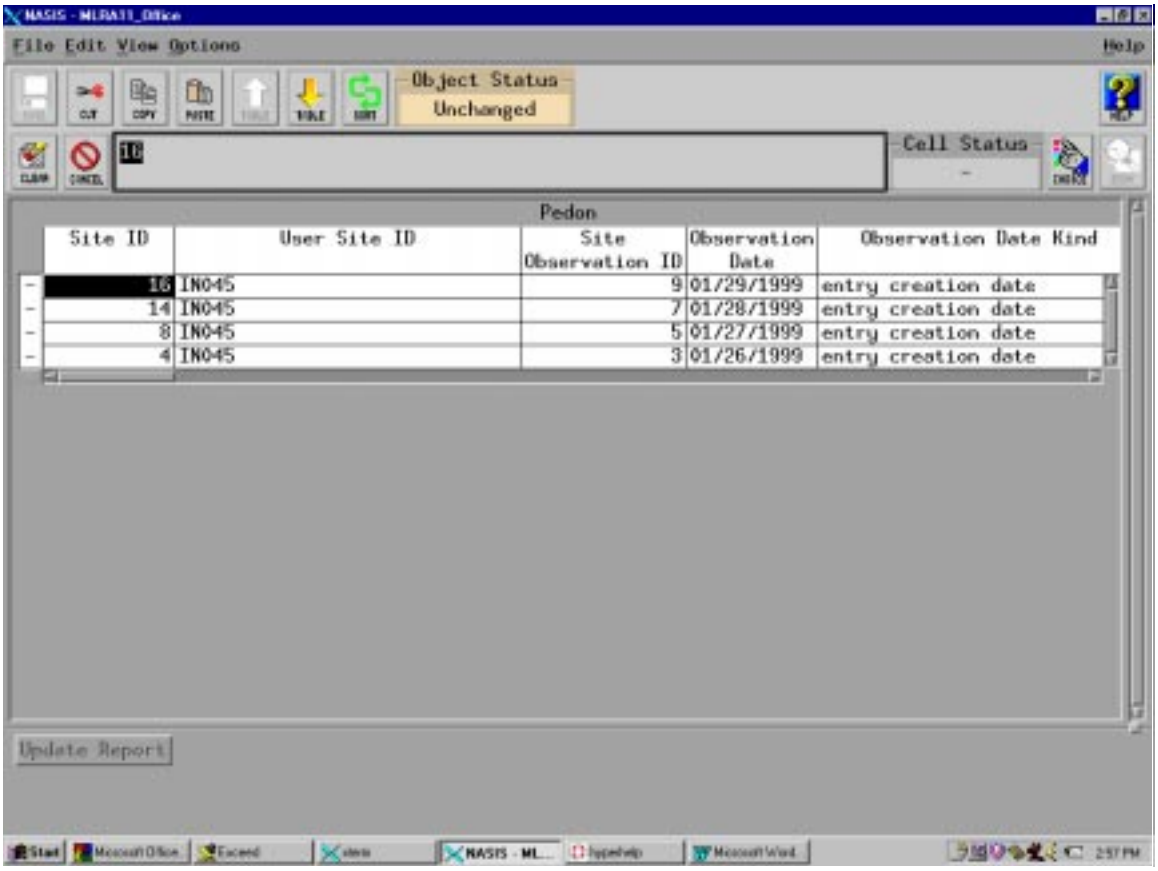
- **You must populate the site table before you can enter a pedon.**
- This is done by **View - site - site**. F8 for a blank row.
- Populate the User site id with the following IN045 as an example which stands for Fountain county Indiana
- Then down table and fill out the site observation date and kind from the choice list. **Note This item must be filled out.**

- You can now enter pedon data
- This is done by **View - pedon - pedon**. F8 for blank row
- Populate: User site ID from choice list, and Observation date and kind from the choice list.
- Note: Observation date and Site observation ID will auto fill
- Down table. F8 for blank row.

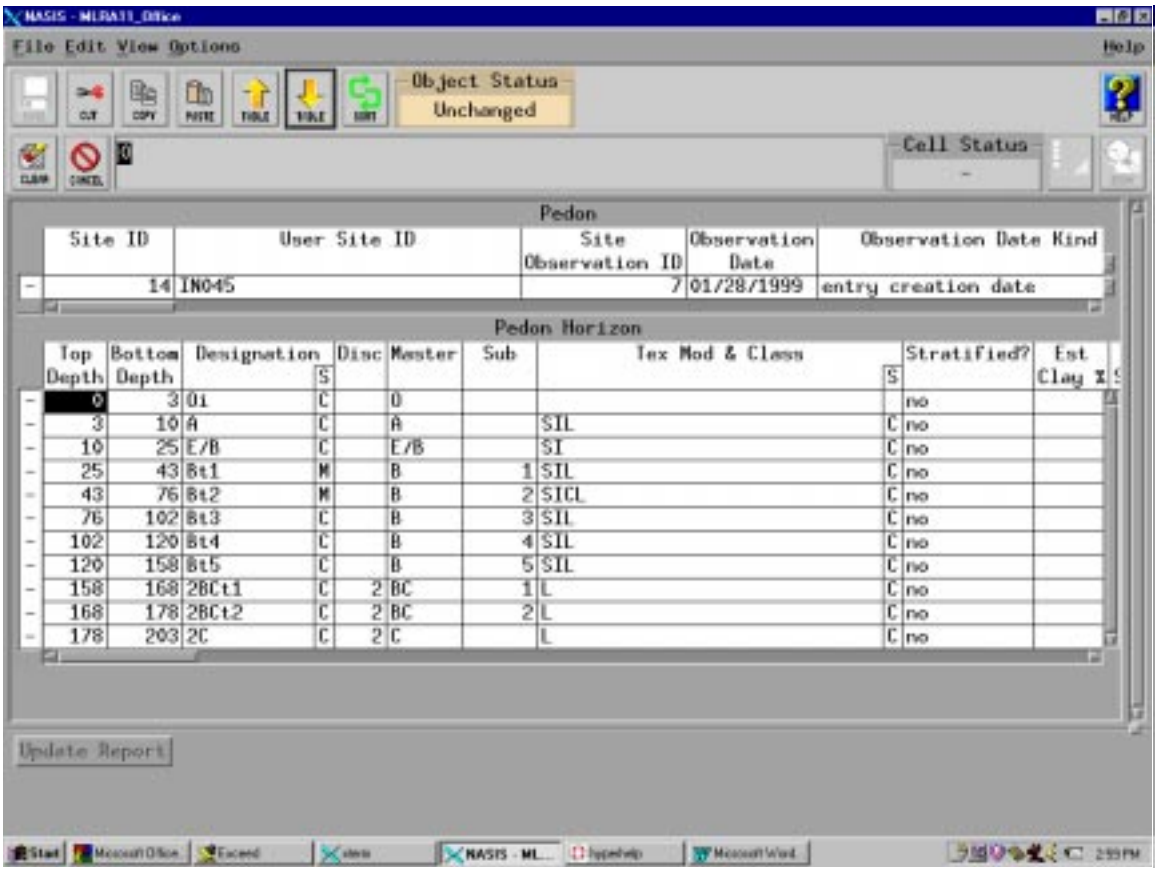
Helpful hints:
- You can use Edit setup to customize data entry. An example is MLRA 11 PEDON under construction.
- When inputting data it is faster to do it by columns.
- Convert inches to centimeters
- Entries with two distinct parts, such as E/B, E & Bt, or fine and medium etcs. for roots will need to be recorded twice
- Concentrations are in the redox features table
- Clay depletions is in the redox features table. **You will need to use 'silt coats' from the pedon horizon ped void surface features for the clay depletion entry.**
- Bedrock is found in the pedon horizon texture table.
- The texture modifier and class in the horizon table is a calculated field based on the textural modifier in the Pedon Horizon Texture table the textural modifier in the Pedon Horizon Texture Modifier table.
- Taxonomic class in the pedon table is a calculated field.
- Note that the pedon report has some bugs and does not deal well with parting to.



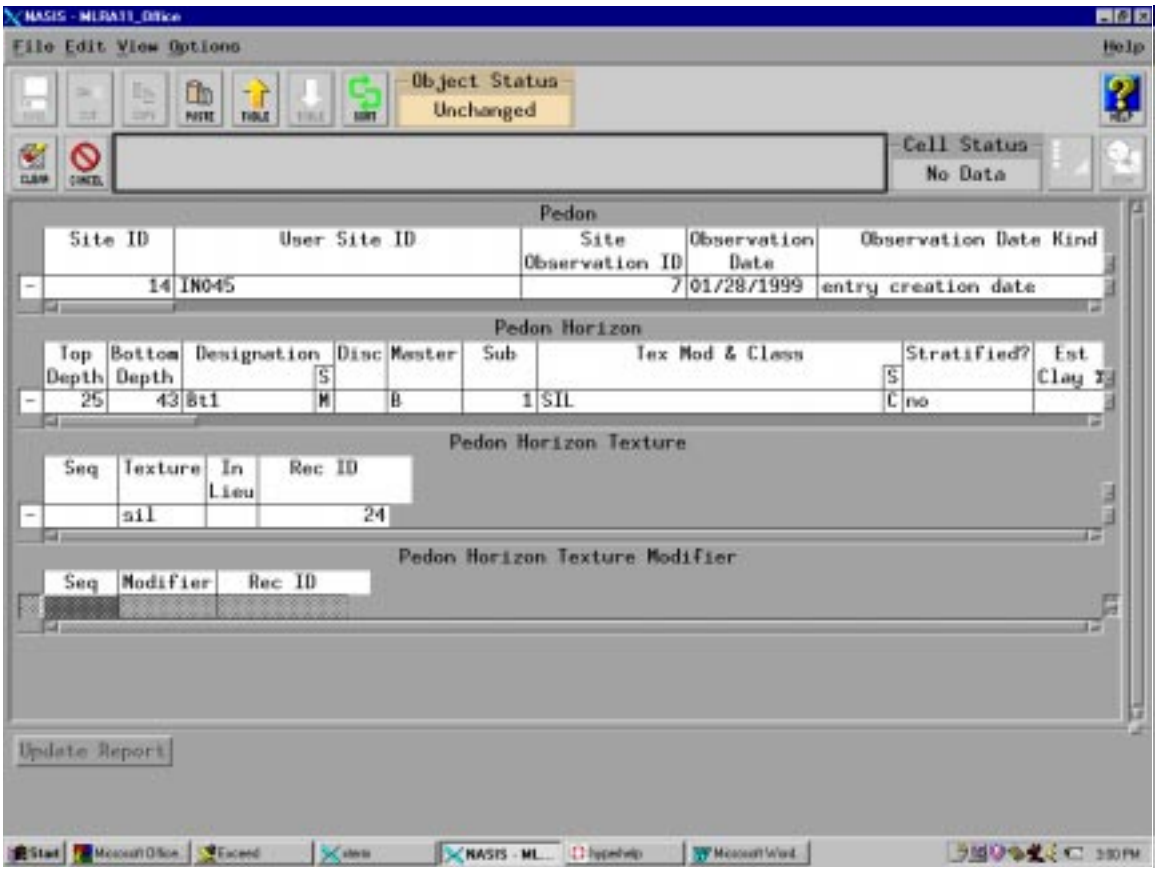
Sample of User site screen



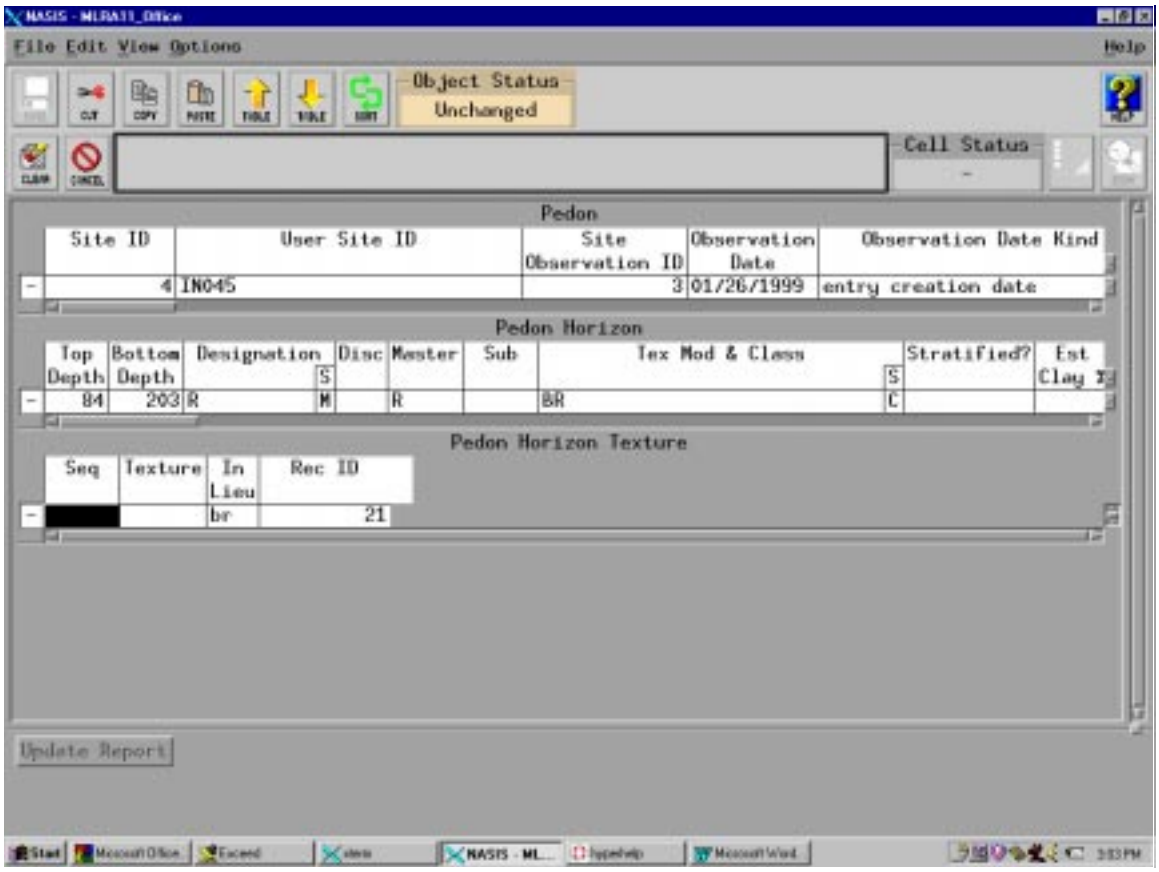
User site screen number 2



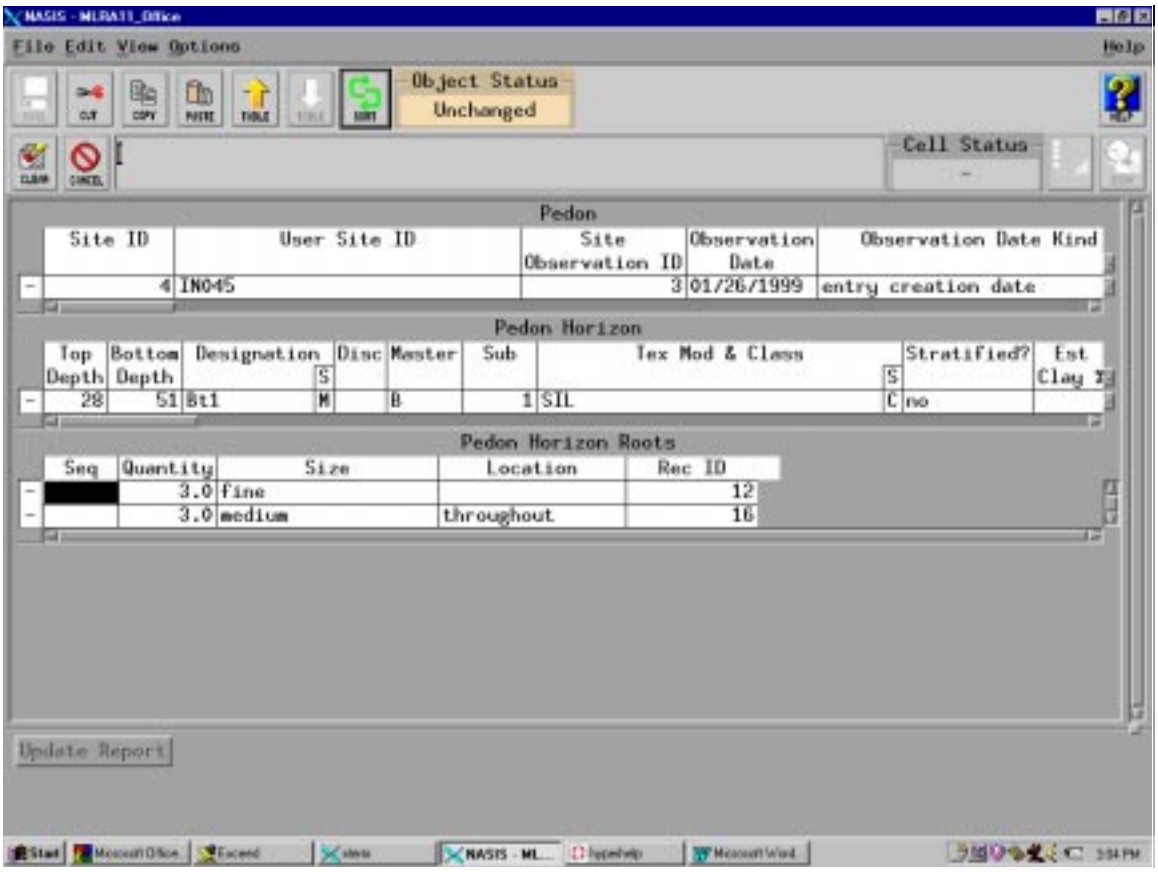
Sample pedon horizon data screen



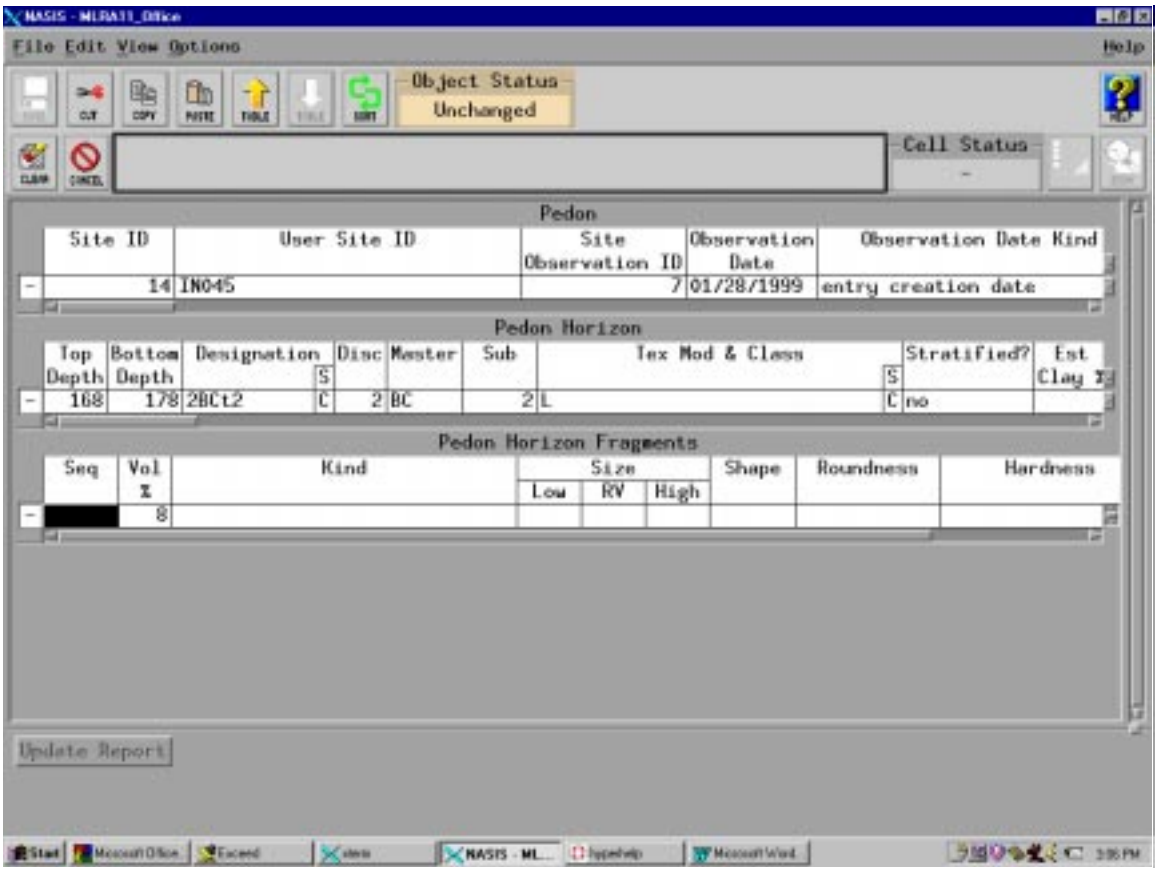
Sample of pedon texture entry screen



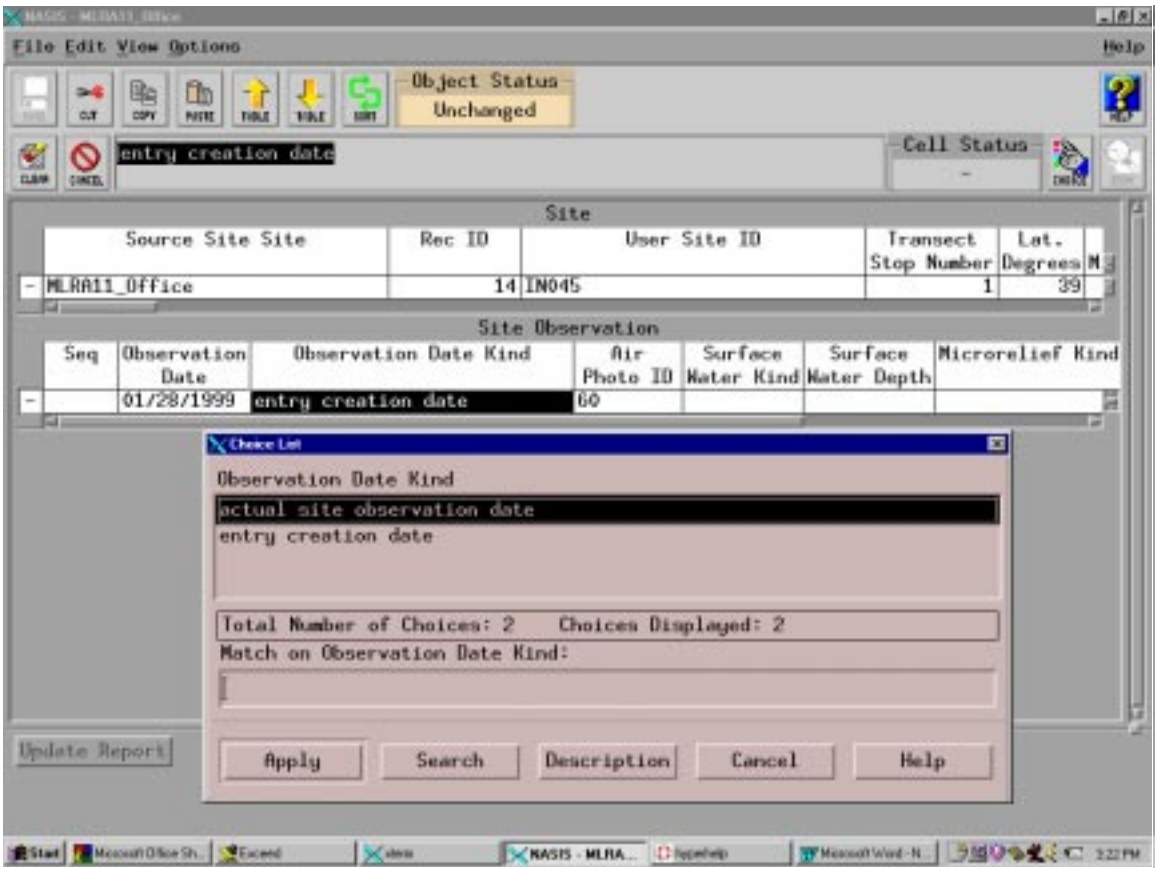
sample of pedon texture modifier screen



Sample screen of roots in pedon



Sample screen for coarse fragments



Sample screen for data entry in site table

Generating A Mapunit Text Note Report by Byron Nagel

(see the attached report)

The NASIS Report Manager provides direction on how to build a selected set for a specific report

1. On the **Options** menu, select **Standard Reports.**
2. On the NASIS Report Manager screen, click the **Local** button to display all reports owned by the local database.
3. Look at the **Report Description** in the right column of the Report Manager.
4. Using the vertical scroll bar in the left column of the Report Manager, scroll down through the **Report Name** column,

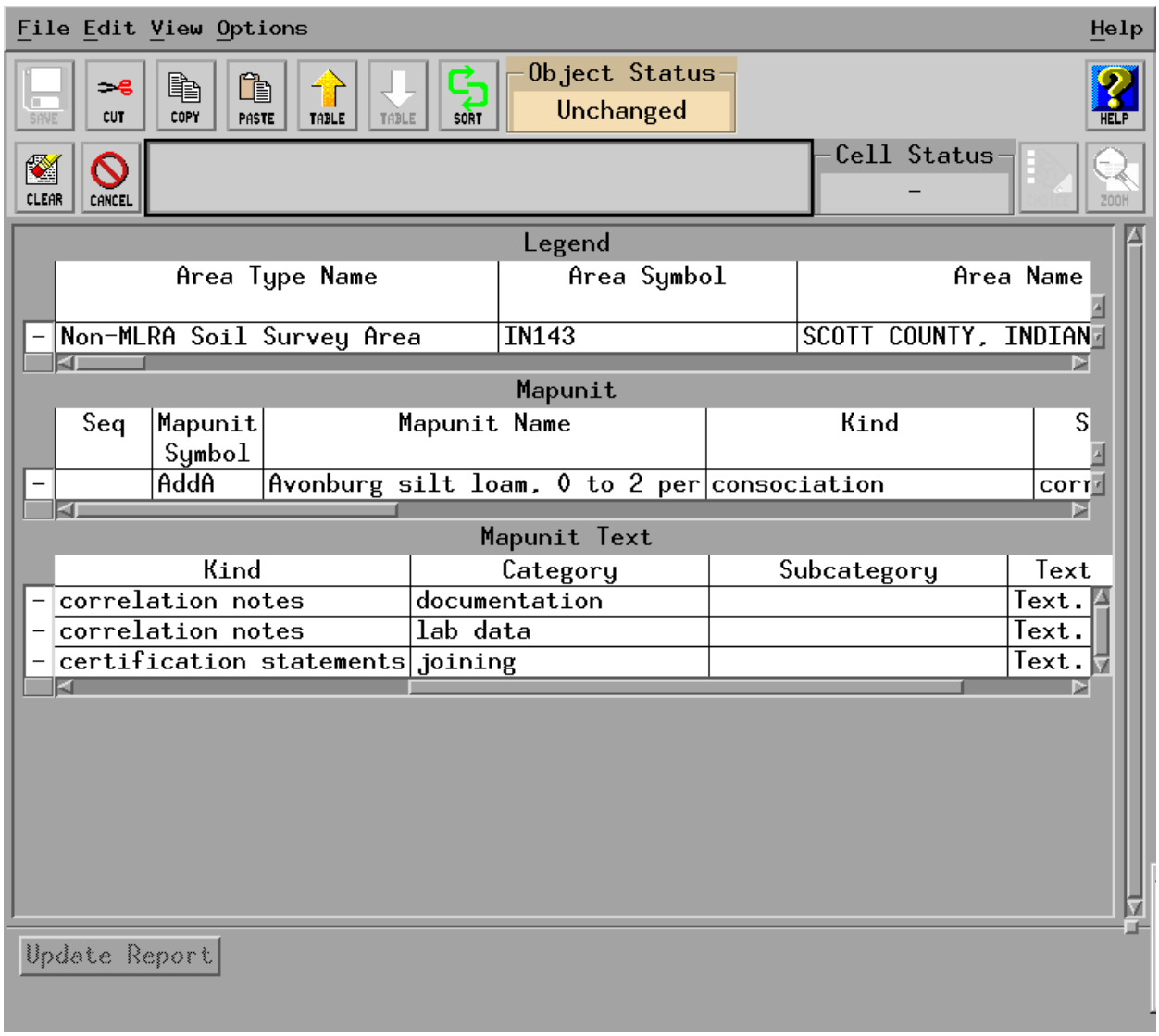
   When you find **LEGEND BY** SYMBOL **WITH MAPUNIT TEXT NOTES,** click it.

5. Read the **Report Description**

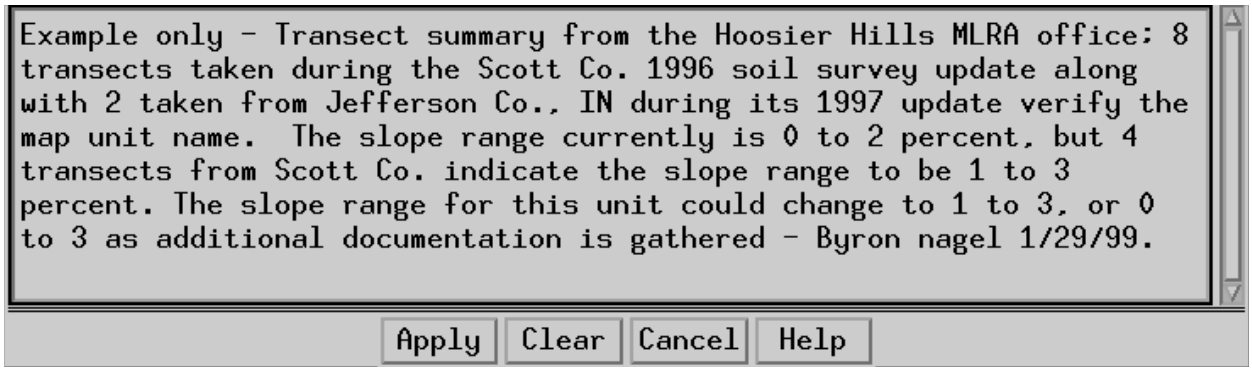
   note: It will read as follows: Soil map legend sorted by mapunit name. This report prints the map unit symbol, map unit name, and map unit history select data by survey with target table:area, legend, other table use in report map unit.

6. Click the **Preview** buttom
7. At NASIS Report Parameters, click **Apply.**
8. **At this point, you can save the report to a file on your computer or print it.**

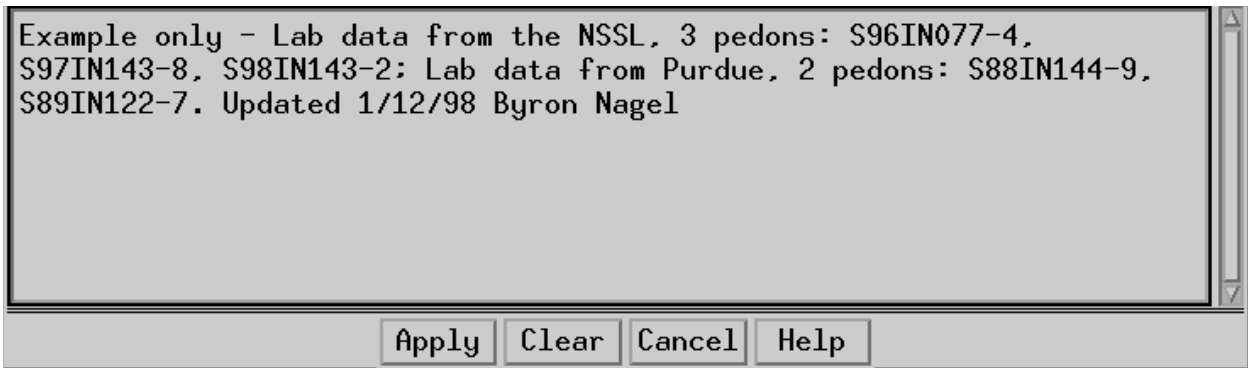
FOR MORE INFORMATION ABOUT GENERATING REPORTS REFER TO NASIS HANDBOOK VERISION 3.1, CHAPTER 12 "PRINTING STORED INTERPREATION".



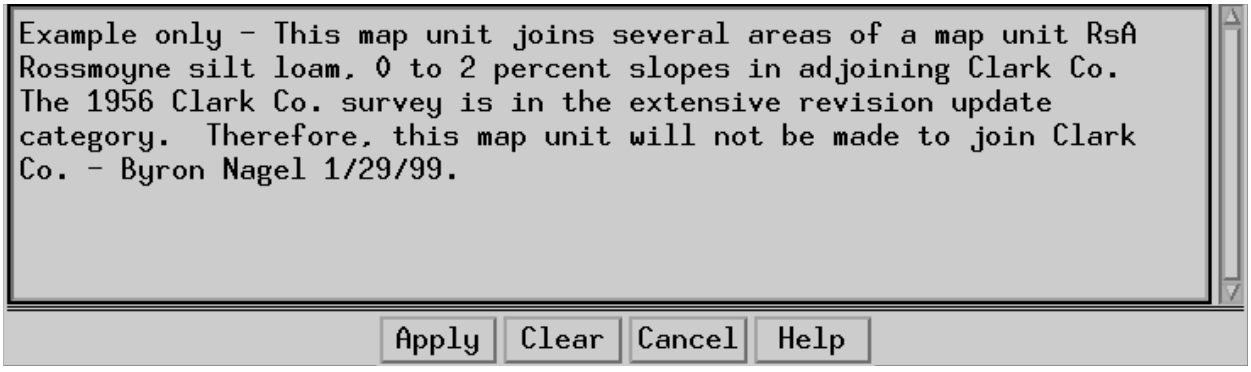
Mapunit - documentation

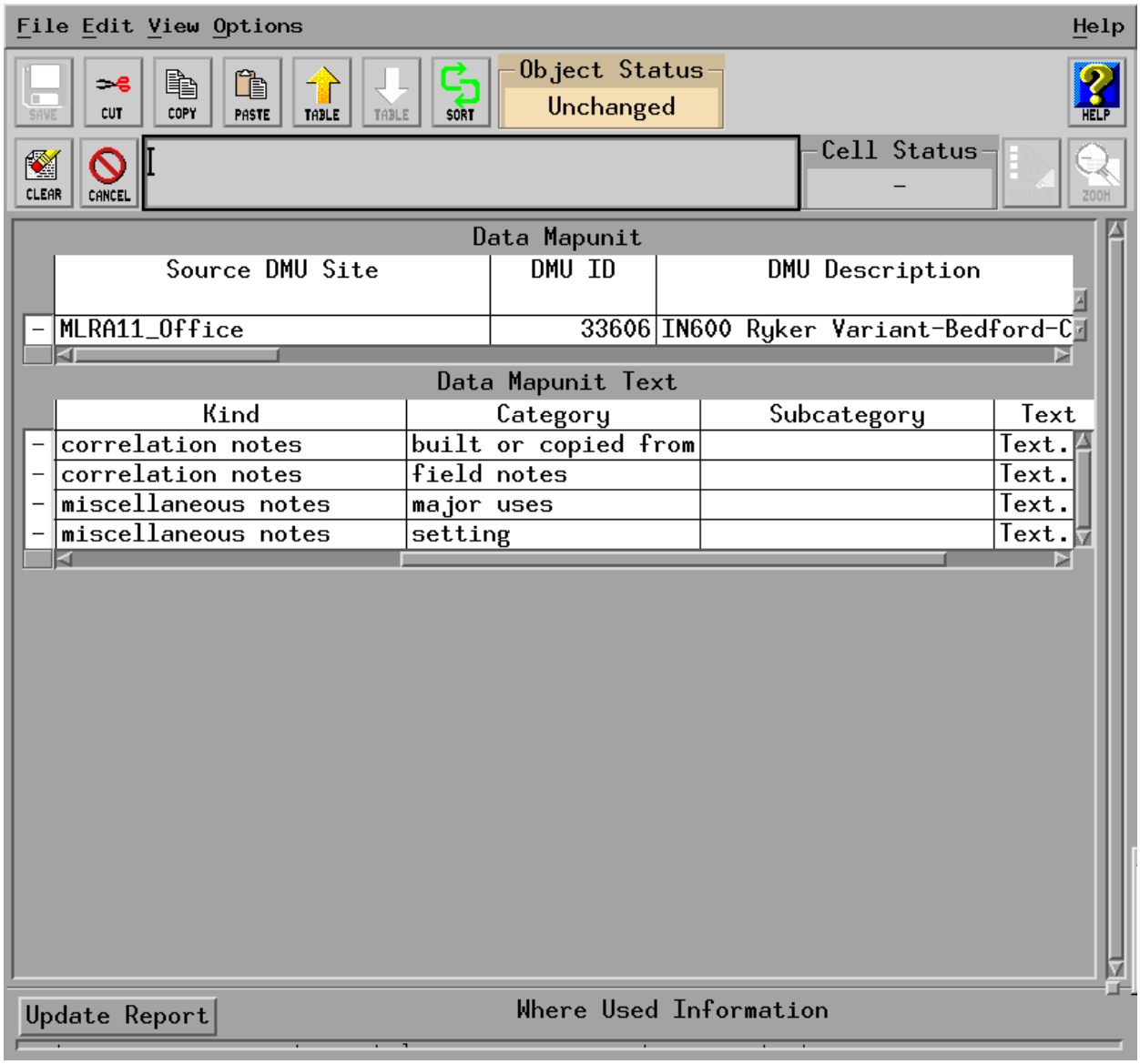


Mapunit - lab data

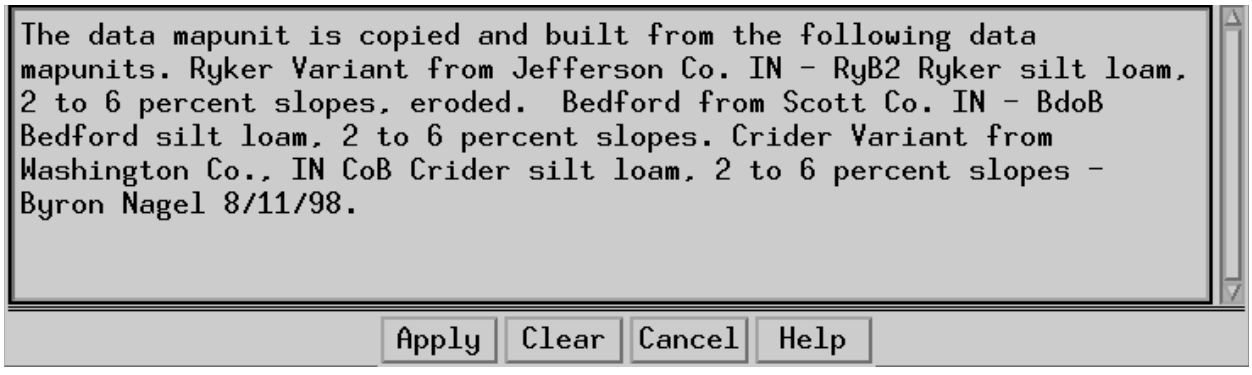


Mapunit - joining

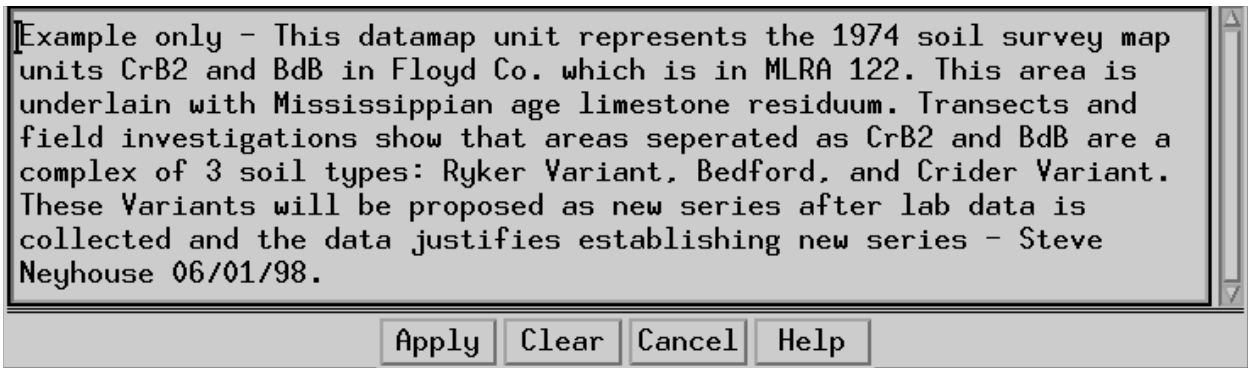




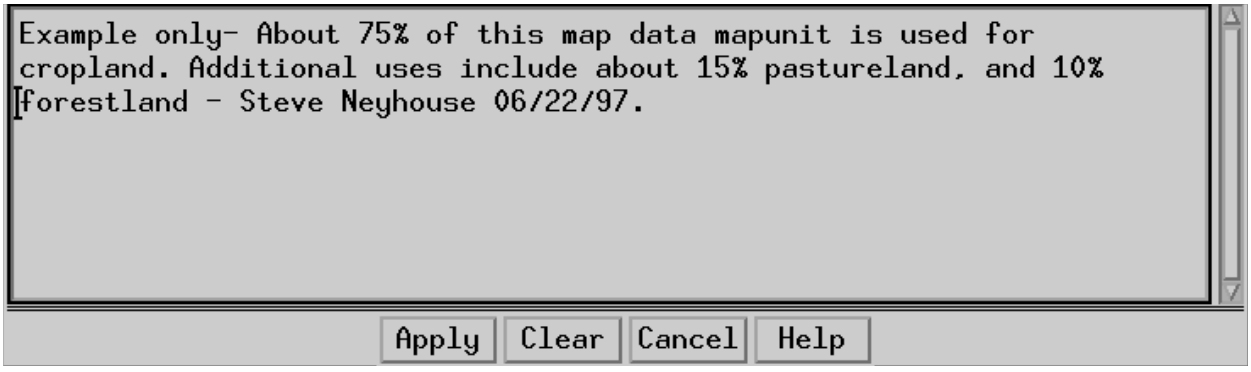
Data mapunit - built or copied from



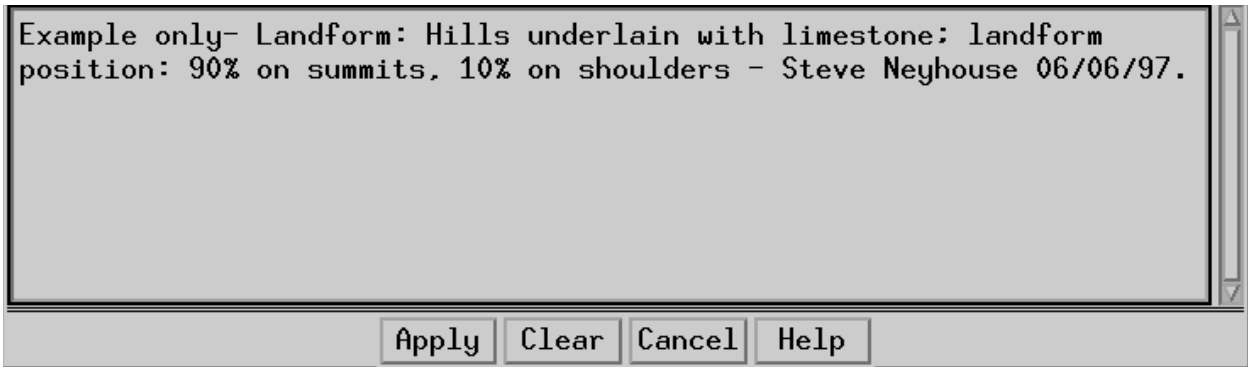
Data mapunit - field notes



Data mapunit -major uses



Data mapunit - setting



Nasis Text Notes by Byron Nagel and Charles Love

Captures SSURGO and Correlation activities in a survey area

Six Major Text Note Sections
>Legend Text Notes

>Mapunit Text Notes

>Mapunit History Notes

>Data Mapunit Text Notes

>Component Text Notes

>Horizon Text Notes

LEGEND TEXT NOTES

LEGEND TEXT NOTES
>Pertinent information for a survey area as a whole for :

>SSURGO Certification

>Soil Survey Correlation Activities

Names to legend text types for SSURGO (example)

SSURGO Certification
>Types of legend text document needed

- kind
- category
- subcategory

Names to legend text types(ssurgo)
Soil Survey Correlation Activities (legend text notes)
>used to document correlation decisions that affect the entire survey area.

>Types

kind
category
subcategory

Names of types for legend text (example)

MAPUNIT TEXT NOTES

SSURGO CERTIFICATION
Document the correlation changes due to SSURGO effort (example: quality joins between survey areas) FOR EACH MAPUNIT IN A SURVEY AREA.

>Type of Documentation needed

Kind - correlation notes

Category - ssurgo

SOIL SURVEY CORRELATION ACTIVITIES
>Documentation of correlation decisions for each mapunit in a survey area.

Names for mapunit text
correlation activities (example)

MAPUNIT HISTORY NOTES

SSURGO

&
SOIL SURVEY CORRELATION ACTIVITIES

SSURGO CERTIFICATION
Managing map unit name changes that effects SSURGO efforts in a subset or MLRA areas (example: line and symbol change on a atlas sheet).

SOIL SURVEY CORRELATION ACTIVITIES
>Managing the changes of a map unit as mapping or field transects progresses.

DATA MAPUNIT TEXT NOTES

DATA MAPUNIT TEXT NOTES
The data mapunit object is used by the field personnel for creating and maintaining the data collected on a daily basis (example: properties, interpretations, and notes).

>This section could be considered how we tracked changes on “SIR’s”, in the past.

NAMES OF TYPES (data mapunit text notes)
>KIND

>correlation notes

>correlation notes

>correlation notes

>miscellaneous notes

>miscellaneous notes

COMPONENT TEXT NOTE TABLE

COMPONENT TEXT NOTES
>Used to document component level notes for manuscript mapunit report

NAMES OF TYPES (examples)
>KIND

>edit notes

>miscellaneous

HORIZON TEXT NOTES

HORIXON TEXT NOTES TABLES
>Document soil characteristic changes by horizon data which may affect a data map unit

NAMES OF TYPES (examples)
>KIND

>edit notes

CONCLUSION
>develop standard guidelines for survey areas

>common choice list

>standard reports for all survey activities

Instructions To Capture Nasis Text Notes

In Region-11,all soil survey activities are managed in NASIS. AII SSURGO soil business and all Soil Survey Correlation activities are captured in NASIS. NASIS provides us with an opportunity to document and keep all pieces of information that go into the production of a soil survey. That opportunity resides in the"Text" tables available in the NASIS root ob,iect tables. To make the most ol' that opportunity there needs to be some sort of structure and organization of these pieces of infon-nation so that they are easily entered into the database to be used by soil scientists and retrieved and understood by our successors. Tlie"REGION-1 I NASIS TEXT GUIDELINES" shall provide consistency ill capturing soil business and correlation activities.

These NASIS Text Guidelines have been organized by topic (subject) - - (sorted alphabetically) and subcategories. For example. A Soil Scientist needs to write a note on farmland classification, but where should that note go in NASIS? Using the Guidelines, he or she will place this in the Data Mapunit Text Table, under the miscellaneous note "kind", farm class " category" and either prime or statewide "subcategory".

The"NASIS Text Table" and "Kind" are fixed by the NASIS software, so we cannot easily add to or change those, but "Category", "Subcategories", and certainly "'Topic (Subject)" and “Usage” are wide open to use however we see fit. It might be best that each topic has only one location in NASIS; in other words, its text should be placed in only one NASIS text table, under a single kind, and under a single category (if needed multiple subcategories are okay). This would make it easy to find all the information on a single topic (like farmland classification), which is particularly important for running reports for the text information and interpretations. This means, one simple query could capture all the data into the selected set and we know we have got it all, rather than wonder where someone may have put it.

Also, each topic (subject) should be placed in the NASIS text table to which the information refers. For example, combined units refer to mapunits, so it is suggested that text on this topic only be placed in the Mapunit Text Table (not also the Data Mapunit Text Table-as currently listed in the GUIDELINES); in the situation, perhaps the subcategory could be a map unit symbol. Also, the text fields in each NASIS table should be "free form". In other words, the author should be able to write anything pertinent to the topic unencumbered by having to place certain key word or phrases in the text. If key words or phrases are needed. they should be used in the "Category" or "Subcategories" data fields.

In the text field, the soil scientist should place their name and date for each note captured. For example,
"The data mapunit is copied and built from the following data mapunits. Ryker variant from Jefferson
Co. IN - RyB2-Ryker silt loarn, 2 to 6 percent slopes, eroded, Byron Nagel 8/11/98."

NASIS TEXT NOTE GUIDELINES
FOR MO - 11

TOPIC, SUBJECT	USAGE	NASIS TEXT TABLES	KIND	CATEGORY	SUBCATEGORIES
Acreage revisions	**Records resolutions of discrepancies between NRI acres and acre figures obtained from digitizing or from published soil survey**	**Legend Text**	**correlation notes**	**revisions**	**acres**
Aml Reports	**Aml Reports needed for SSURGO certification**	**Legend Text**	**certification statements**	**aml reports**	
Combined units	**Documentation for combination of two or more map units**	**Data Mapunit Text**	**correlation notes**	**combined units**	
Component Revisions	**Documents any and all changes to the component data and interpretations**	**Component Text**	**edit notes**	**revisions**	
Correlation amendment	**Amendments to correlation documents**	**Legend text**	**correlation notes**	**amendments**	
Correlation document	**To insert the Correlation Memorandum**	**Legend Text**	**correlation notes**	**correlation memo**	
Correlation notes	**To document tentative and approved correlation decisions.**	**Legend Text**	**correlation notes**	**correlation decisions**	
Data mapunits - edited/ built	**Documentation on which data mapunit(s) were used to build or edit this data mapunit**	**Data Mapunit Text**	**correlation notes**	**built or copied from**	
Data Mapunit Setting	**Documents information on the setting (landform & landform position)**	**Data Mapunit Text**	**miscellaneous notes**	**setting**	
Data Mapunit Uses	**Documents information on the major uses**	**Data Mapunit Text**	**miscellaneous notes**	**major uses**	
TOPIC, SUBJECT	**USAGE**	**NASIS TEXT TABLES**	**KIND**	**CATEGORY**	**SUBCATEGORIES**

NASIS TEXT NOTE GUIDELINES
FOR MO - 11

Digitized non SSURGO	**Documents the reason(s) this digitized survey does not meet SSURGO standards**	**Legend Text**	**miscellaneous notes**	**nonssurgo**	
Final Field Reviews	**To insert Final Field Review Reports**	**Legend Text**	**field reviews**	**ffr233**	**date**
Geomorphic Terms	**Additional landscape and landform terms not found in choice list**	**Component Text**	**miscellaneous notes**		**local (DMU Text), adjective (Component Text)**
Horizon Revisions	**Documents any and all changes to the horizon data**	**Horizon Text**	**edit notes**	**revisions**	
Initial Field Reviews	**To insert Initial Field Review Reports**	**Legend Text**	**field reviews**	**ifr233**	**date**
Joining	**Documentation for decisions relating to joins with other survey areas**	**Mapunit Text**	**certification state-ments**	**joining**	
Lab data	**Used to insert all lab data for a map unit that has been collected within an MLRA; includes summary reports of lab data analysis**	**Mapunit Text**	**correlation notes**	**lab data**	
Landform	**To capture notes about the correlation of soils to a particular landforms in a subset**	**Legend Text**	**correlation notes**	**landform**	
Map compi-lation	**Instructions for map compilation, map fin-ishing, and digitizing**	**Legend Text**	**certification state-ments**	**map compila-tion issue**	
Metadata	**Metadata notes needed for SSURGO certi-fication**	**Legend Text**	**certification state-ments**	**metadata**	
TOPIC, SUBJECT	**USAGE**	**NASIS TEXT TABLES**	**KIND**	**CATEGORY**	**SUBCATEGORIES**
MOU/MOA	**To insert the MOU and/or MOA for the soil survey**	**Legend Text**	**mou**		
Progressive Field Reviews	**To insert Progressive Field Review Reports**	**Legend Text**	**field reviews**	**pfr233**	**date**

NASIS TEXT NOTE GUIDELINES
FOR MO - 11

SSURGO date	**To populate the date for the a SSURGO download; use mm/dd/yy format**	**Legend Text**	**certification state-ments**	**date**	
SSURGO notes	**Notes pertaining to the certification of the data for SSURGO**	**Legend Text**	**certification state-ments**	**notes**	
Support and documenta-tion data for Data Mapu-nit	**Notes on Data Mapunit collected during the course of field work**	**Data Mapunit Text**	**correlation notes**	**field notes**	
Support and documenta-tion data for map unit	**Transect and other data collected; sum-mary of transect data, 232's, and other field notes**	**Mapunit Text**	**correlation notes**	**documentation**	
MOU/MOA	**To insert the MOU and/or MOA for the soil survey**	**Legend Text**	**mou**		
SSURGO date	**To populate the date for the a SSURGO download; use mm/dd/yy format**	**Legend Text**	**certification state-ments**	**date**	
Aml Reports	**Aml Reports needed for SSURGO certifi-cation**	**Legend Text**	**certification state-ments**	**aml reports**	
Metadata	**Metadata notes needed for SSURGO certi-fication**	**Legend Text**	**certification state-ments**	**metadata**	
Map compi-lation	**Instructions for map compilation, map fin-ishing, and digitizing**	**Legend Text**	**certification state-ments**	**map compila-tion issue**	
TOPIC, SUBJECT	**USAGE**	**NASIS TEXT TABLES**	**KIND**	**CATEGORY**	**SUBCATEGORIES**
SSURGO notes	**Notes pertaining to the certification of the data for SSURGO**	**Legend Text**	**certification state-ments**	**notes**	
Geology	**To capture general geology of the subset**	**Legend Text**	**correlation notes**	**geologic his-tory**	
Landform	**To capture notes about the correlation of soils to a particular landforms in a subset**	**Legend Text**	**correlation notes**	**landform**	

NASIS TEXT NOTE GUIDELINES
FOR MO - 11

Acreage revisions	**Records resolutions of discrepancies between NRI acres and acre figures obtained from digitizing or from published soil survey**	**Legend Text**	**correlation notes**	**revisions**	**acres**
Correlation amendment	**Amendments to correlation documents**	**Legend text**	**correlation notes**	**amendments**	
Correlation document	**To insert the Correlation Memorandum**	**Legend Text**	**correlation notes**	**correlation memo**	
Correlation notes	**To document tentative and approved correlation decisions.**	**Legend Text**	**correlation notes**	**correlation decisions**	
Initial Field Reviews	**To insert Initial Field Review Reports**	**Legend Text**	**field reviews**	**ifr233**	**date**
Progressive Field Reviews	**To insert Progressive Field Review Reports**	**Legend Text**	**field reviews**	**pfr233**	**date**
Final Field Reviews	**To insert Final Field Review Reports**	**Legend Text**	**field reviews**	**ffr233**	**date**
Digitized non SSURGO	**Documents the reason(s) this survey that is digitized does not meet SSURGO standards**	**Legend Text**	**miscellaneous notes**	**nonssurgo**	
TOPIC, SUBJECT	**USAGE**	**NASIS TEXT TABLES**	**KIND**	**CATEGORY**	**SUBCATEGORIES**
Lab data	**Used to insert all lab data for a map unit that has been collected within an MLRA; includes summary reports of lab data analysis**	**Mapunit Text**	**correlation notes**	**lab data**	
Support and documentation data for map unit	**Transect and other data collected; summary of transect data, 232's, and other field notes**	**Mapunit Text**	**correlation notes**	**documentation**	
Joining	**Documentation for decisions relating to joins with other survey areas**	**Mapunit Text**	**certification statements**	**joining**	

NASIS TEXT NOTE GUIDELINES
FOR MO - 11

Data mapu-nits - edited/ built	**Documentation on which data mapunit(s) were used to build or edit this data mapu-nit**	**Data Mapunit Text**	**correlation notes**	**built or copied from**	
Support and documen-taion data for Data Mapu-nit	**Notes on Data Mapunit collected during the course of field work**	**Data Mapunit Text**	**correlation notes**	**field notes**	
Data Mapu-nit Uses	**Documents information on the major uses**	**Data Mapunit Text**	**miscellaneous notes**	**major uses**	
Data Mapu-nit Setting	**Documents information on the setting (landform & landform position)**	**Data Mapunit Text**	**miscellaneous notes**	**setting**	
Component Revisions	**Documents any and all changes to the component data and interpretations**	**Component Text**	**edit notes**	**revisions**	
Horizon Revisions	**Documents any and all changes to the horizon data**	**Horizon Text**	**edit notes**	**revisions**	

Guide for Selecting and Editing Manuscript Tables by Bryon Nagel

Prior to selecting the manuscript tables: Populate "major component" in data mapunit (yes or no)

For obtaining tables without included components --select target as component, not datamap unit.

For M0-11------ Select Query: - Local - *MO-11 Load the Major components for a survey area*

For M0-13------ Select Query: - Local - *Area/Legend/Comp. By area&leg. stt.(active MUs, major comp.)*

Which tables to pull and from where:

Manuscript Table and Name:	From:	Table selected:
4 - Classification of the Soils (with taxadjuncts)	National	MANU Table Q1.
4 - Classification of the Soils (w/o taxadjuncts)	National	MANU Table Q.
5 - Acreage and Proportionate Extent of the Soils	National	MANU Table A.
6 - Main Cropland Limitations and Hazards	Local	**MLRA-11 Cropland Limitation Report Byron Nagel
7 - Land Capability and Yields Per Acre of Crops and Pasture[1]	National	MANU Table B5.
8 - Main Pasture Limitations and Hazards	Local	**MLRA-11 Pastureland Limitation Report Byron Nagel
9 - Prime Farmland	National	MANU Table Y.
10 - Windbreaks and Environmental Plantings[2]	National	MANU Table U.
11 - Forestland Management and Productivity[3]	Local	Woodland productivity new report
12 - Recreational Development	National	MANU Table G.
13 - Wildlife Habitat	National	MANU Table F.
14 - Building Site Development	National	MANU Table M.
15 - Sanitary Facilities	National	MANU Table L.
16 - Construction Materials	National	MANU Table N.
17 - Water Management	National	MANU Table P.
18 - Engineering Index Properties	National	MANU Table H.
19 - Physical and Chemical Properties of the Soil[4]	FOCS*	Both Physical and Chemical Properties tables
20 - Water Features	FOCS*	Water features
21 - Soil Features	National	MANU Table K2.

*Must complete a FOCS download with local query for components only, and pull these tables

**In development stage, please submit comments

[1] Land Capability and Yields Per Acre of Crops and Pasture - must select crop and pasture species you need for your survey (in WORD, realign columns in order that you want in publication; cannot be done in Frame maker) This table is for map unit, non-irrigated yields. Select table B1 for both irrigated and non-irrigated yields

[2] Windbreaks and Environmental Plantings - edit the NASIS database before generating table. See SDQS for new Indiana Windbreak Groupings

[3]Forestland Management and Productivity - in NASIS, component forest productivity - populate sequence column with tree species (common trees), and the first in the sequence needs to correspond with the ordination symbol. In NASIS Ft^3/Acre/Yr column with values populated 0, either clear cell; or edit table column "Volume of wood fiber" in WORD and replace with ---.

[4]Physical and Chemical Properties of the Soil - These table are a combined table of the Physical Properties and the Chemical properties tables. To copy or delete certain columns - select the cursor where you will delete both the column(s) line and area, and highlight by ctrl-shift-F8 and use arrow keys

Editing tables and other sections

Open tables in WORD (files as type - all files)

For editing tables - select all - change font size to 8 (7 for a few of the tables); change type to letter gothic (if available), otherwise courier new ; always use courier new for table 19 which is in landscape orientation

- Select page setup
- For tables that do not use full horizontal space - top, bottom and left margins can be to set 1", and.5" for right margin
- For tables that do not use full horizontal space - left and right margins need to be set at 0.2 to 0.4"

For General Nature of County, Geology and Parent Materials, Agronomy, and other sections that are written by guest authors - make font size 10, and type courier new

For Series and RIC, put in WORD file. This will be merged with the MUG report.

MUG - The shell script for generating Map units is under Local reports and currently titled "Backup MO-11 MUG January 19, 1999 (latest working version)". This mug report is in the development stage, and check with MO for title of the most current version.

The name does change but should include (latest working version).

Instructions for populating data elements in NASIS for MUG by Gary Struben

To generate Landform terms in NASIS MUG, the “Component Geomorphic Description” must be populated.

To generate Position on Landform terms the “Component Two Dimensional Surface Morphometry” and/or the “Component Three Dimensional Surface Morphometry” elements must be populated.

To populate these data elements in NASIS select-
View
Components
Component Geomorphic Description
Component Two Dimensional Surface Morphometry or Component Three Dimensional Surface Morphometry

Under Component
“Component Name” was downloaded in all CAPS, and should be changed to First letter CAPS only.
Enter only the series name under
“Component Name”. Enter phase criteria under “Local Phase”, such as severely eroded, undrained, substratum phases, flooding phases, etc.

The only additional components that were downloaded from 3-SD were the hydric inclusions, so all other components (inclusions) will need to be added.
To add other components, press F-8 to insert a line for each additional component.
Add percent of other components under Comp %, RV. Probably will have to adjust the Comp % of the major component to make the total of all components equal 100%.

Under Component Geomorphic Description
“Feature Type” will be Landform in most all cases.
“Feature Name” can be selected from choice list of 325 terms. See attached list!

Under Two Dimensional Surface Morphometry
Populate “Hillslope Profile” if you want Position on Landform to be one of the following choices: summit, shoulder, backslope, footslope, toeslope

Under Three Dimensional Surface Morphometry
Populate “Geomorphic Component Hills” if you want Position on Landform to be one of the following choices: interfluve, head slope, nose slope, side slope, base slope

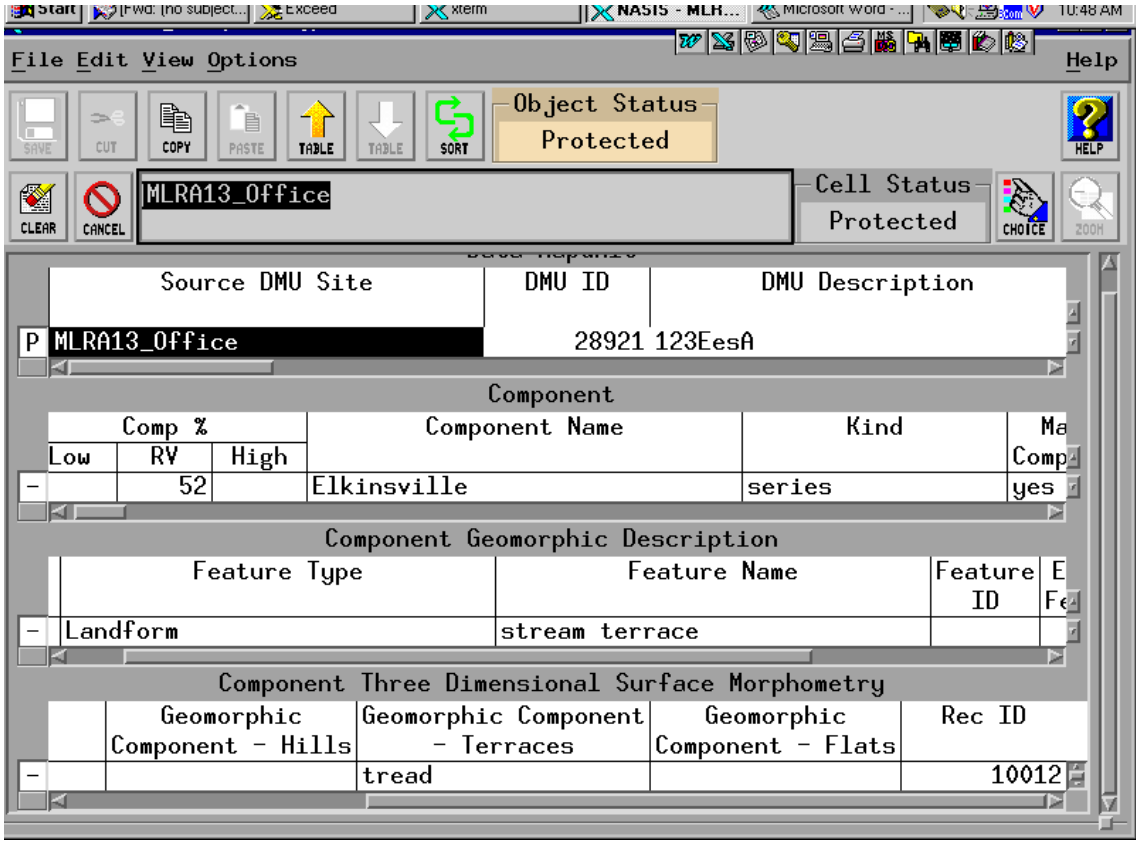
Populate “Geomorphic Component Terraces” if you want Position on Landform to be one of the following choices: riser or tread

Populate “Geomorphic Component Flat Plains ” if you want Position on Landform to be one of the following: flat or nonflat

To run report, select-
Options
Standard Reports
Local
Backup Mo-11 MUG January 19,1999 (latest working version)

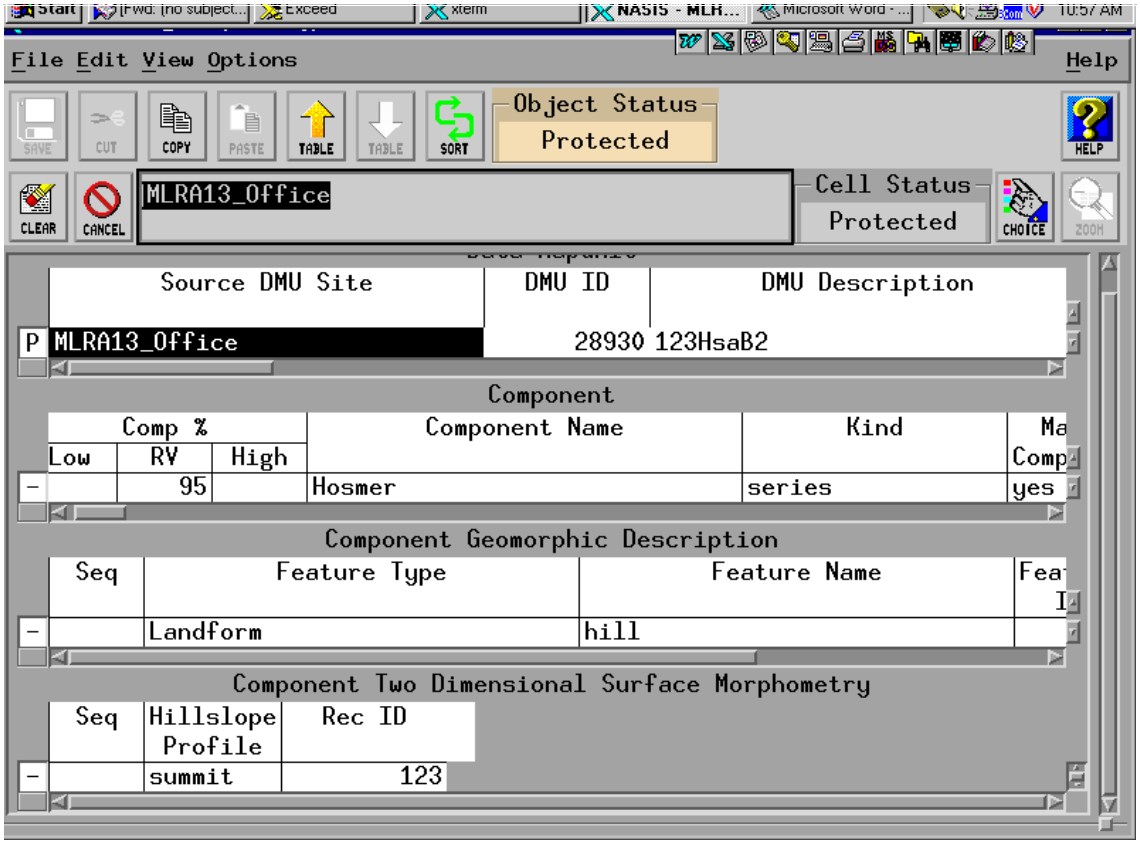
Examples of some edit screens by Gary Struben

Procedure for populating Position on Landform (geomorphic component)



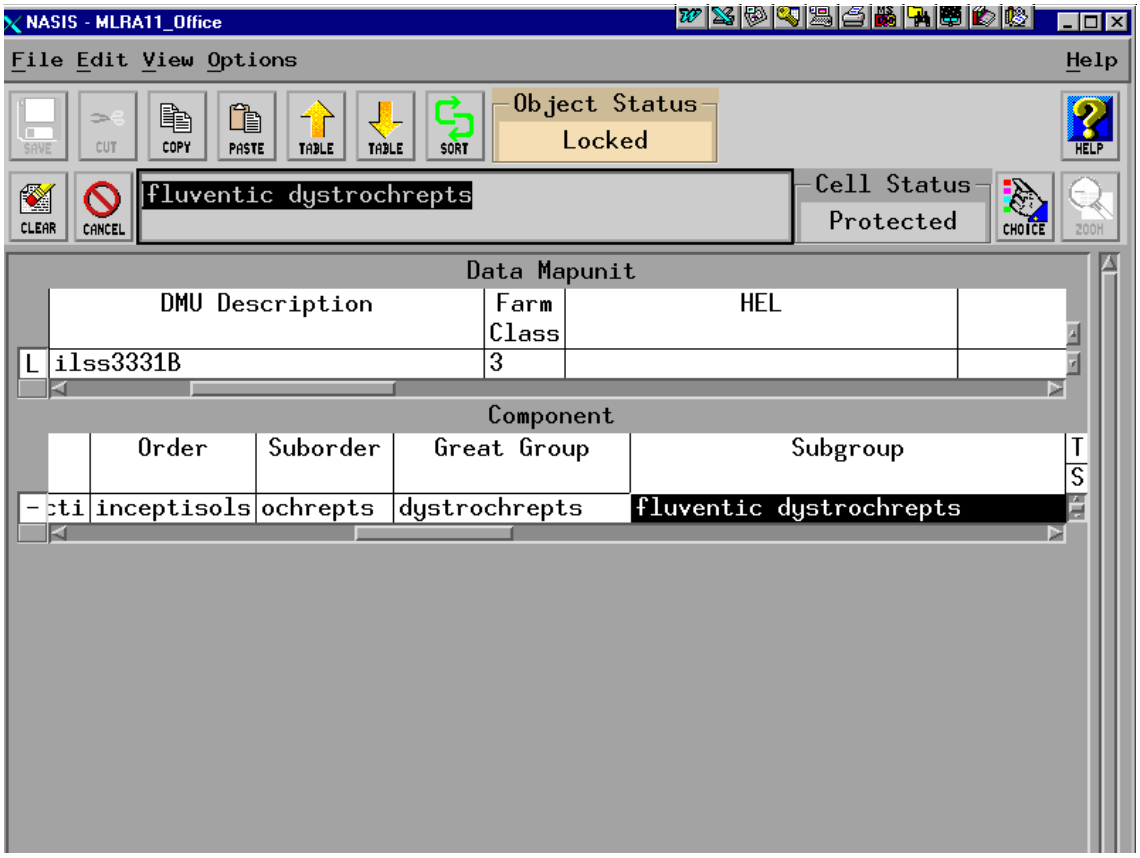
View
Components
Component Geomorphic Description
Component Three Dimensional Surface Morpmometry

Procedure for populating Position on Landform (hillslope profile)



View
Components
Component Geomorphic Description
Component Two Dimensional Surface Morphometry

Procedure for editing Taxonomic suborder, greatgroup, and subgroup



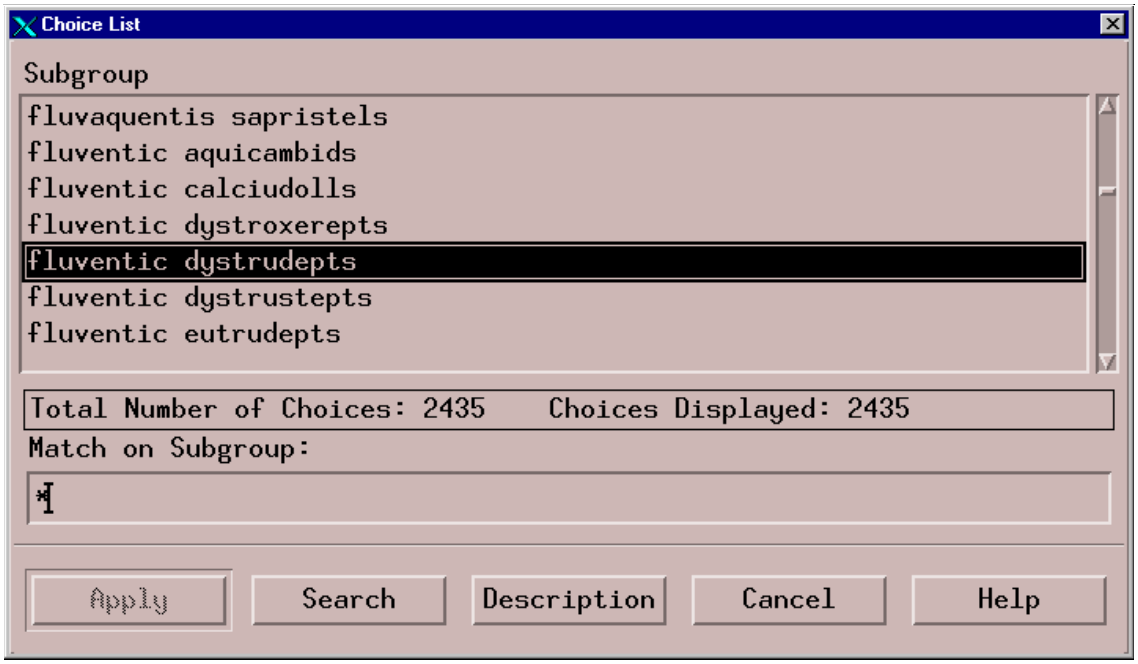
View
Components
Component

Options
Change Edit Setup
Local
Select Edit Setup: taxonomy and kf kw
Apply

Click on “fluventic dystrochrepts” under Subgroup: Change dystrochepts to dystrudepts
Click on “dystrochrepts” under Great Group: Change dystrochrepts to dystrudepts
Click on “ochrepts” under Suborder: Change ochrepts to udepts

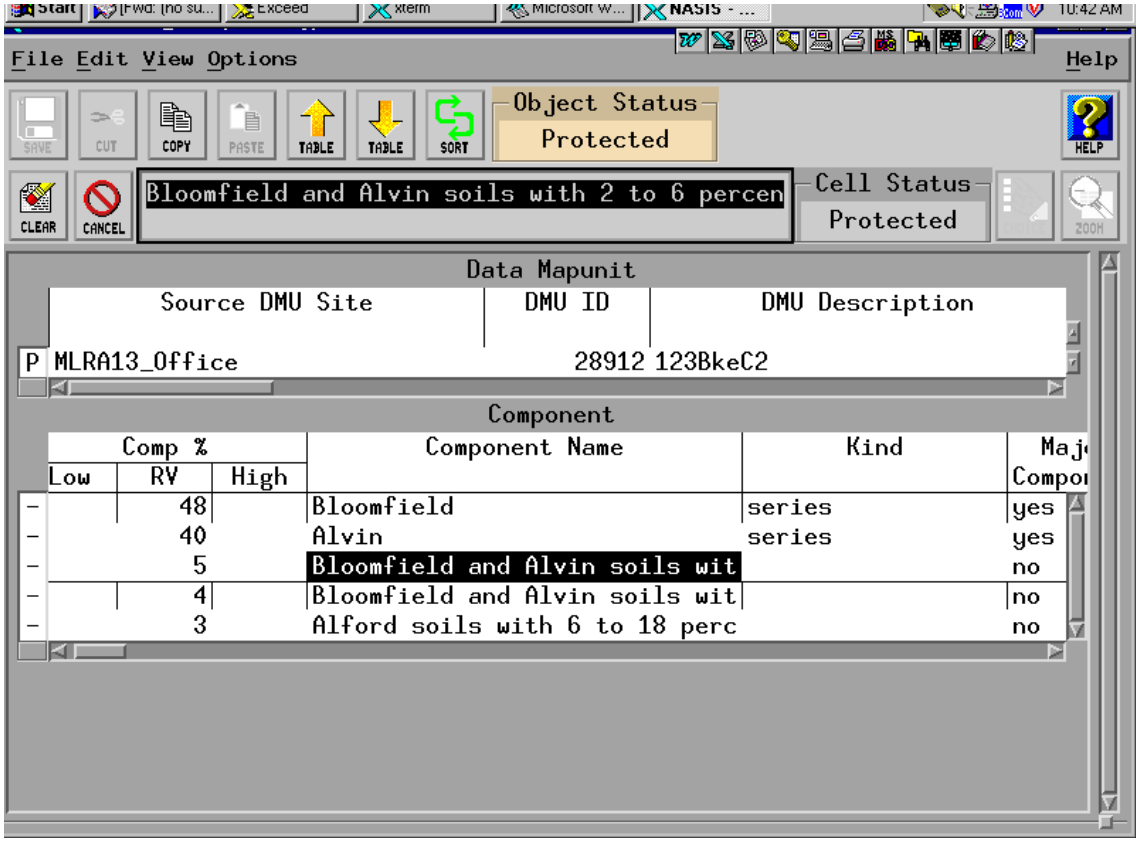
OR to use Choice list, see the following page

Procedure for using Choice List



Click on Choice list
To get entire list of choices Type * in Match on Subgroup: , then click on Search
Arrow down to select one and Apply

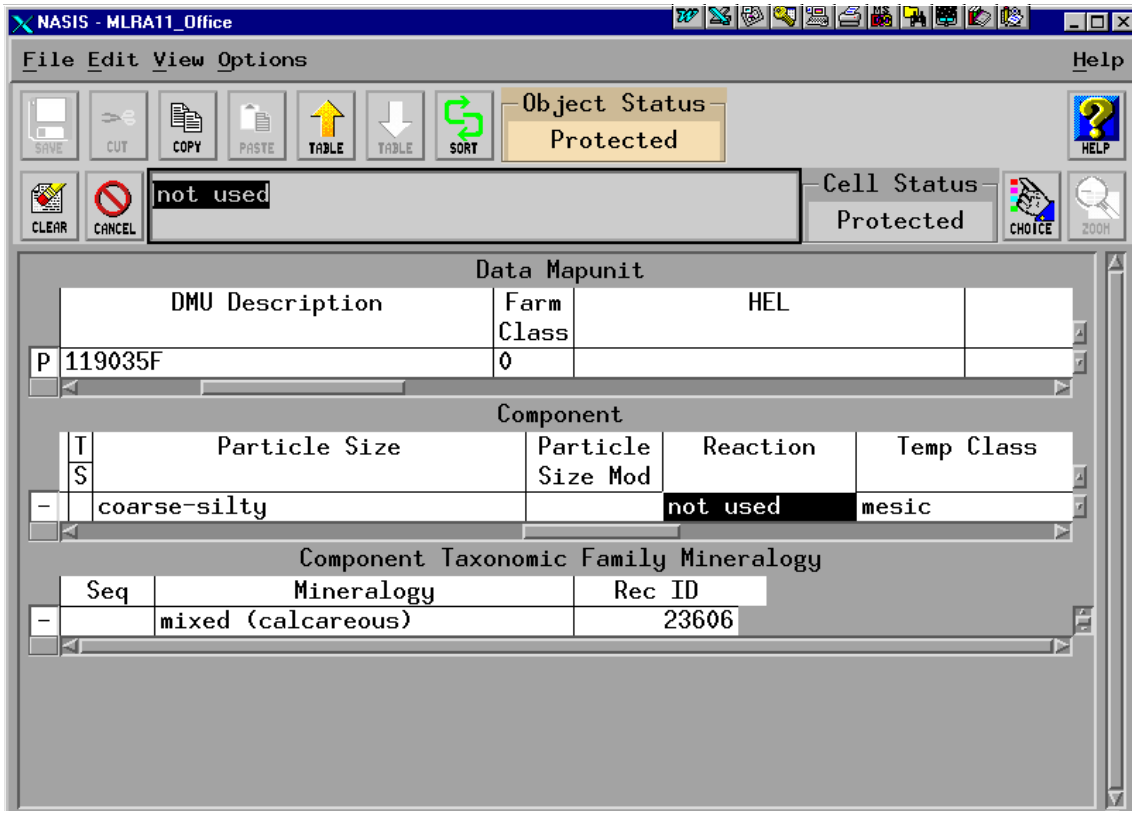
Procedure for populating Minor Components



View
Components
Component

To add components, press F8 to insert a line for each additional component.
Under Major Component, select yes for those named in the map unit name and select no for others (inclusions).
Adjust Comp % to make the RV add up to 100%.

Procedure for correcting Mineralogy and Reaction of soils in calcareous family



View

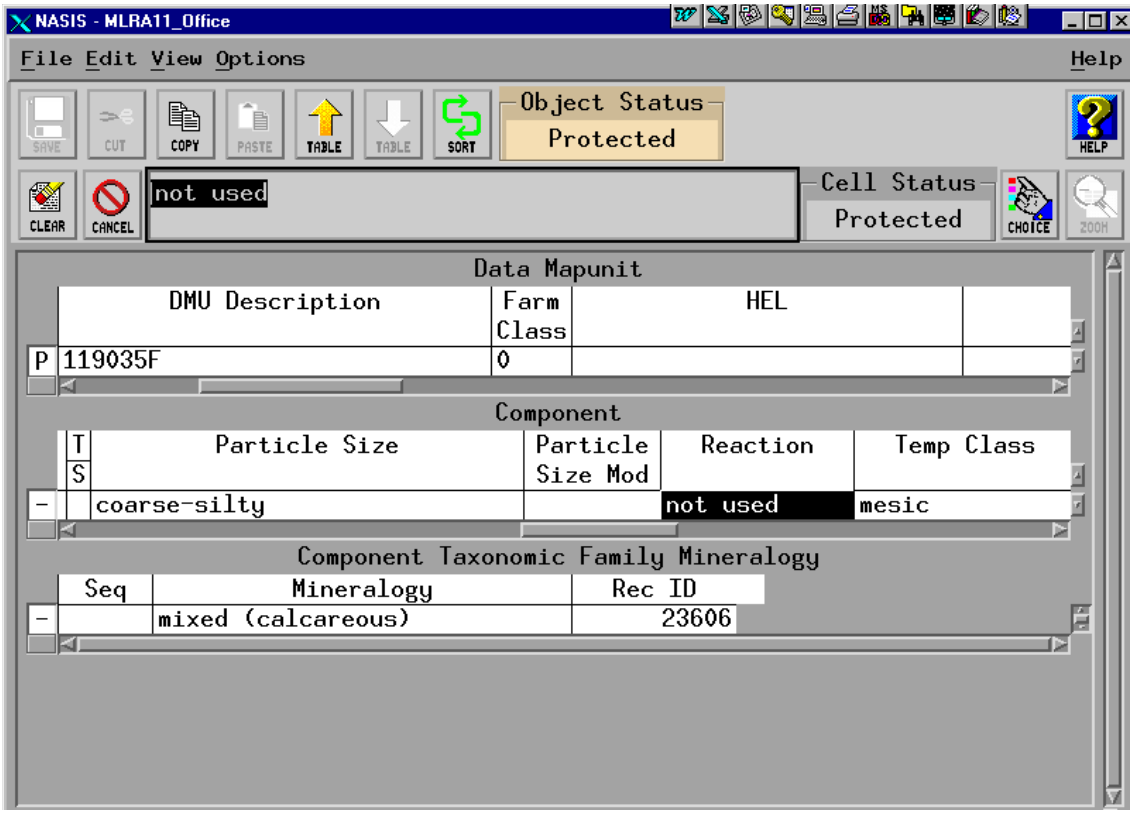
Components

Component Taxonomic Family Mineralogy

Click on “mixed (calcareous)” in Mineralogy row: Either type mixed or choose from Choice list

Click on “not used” under reaction in Component row: Either type calcareous or choose from Choice list

Procedure for correcting Mineralogy and Reaction of soils in calcareous family



View

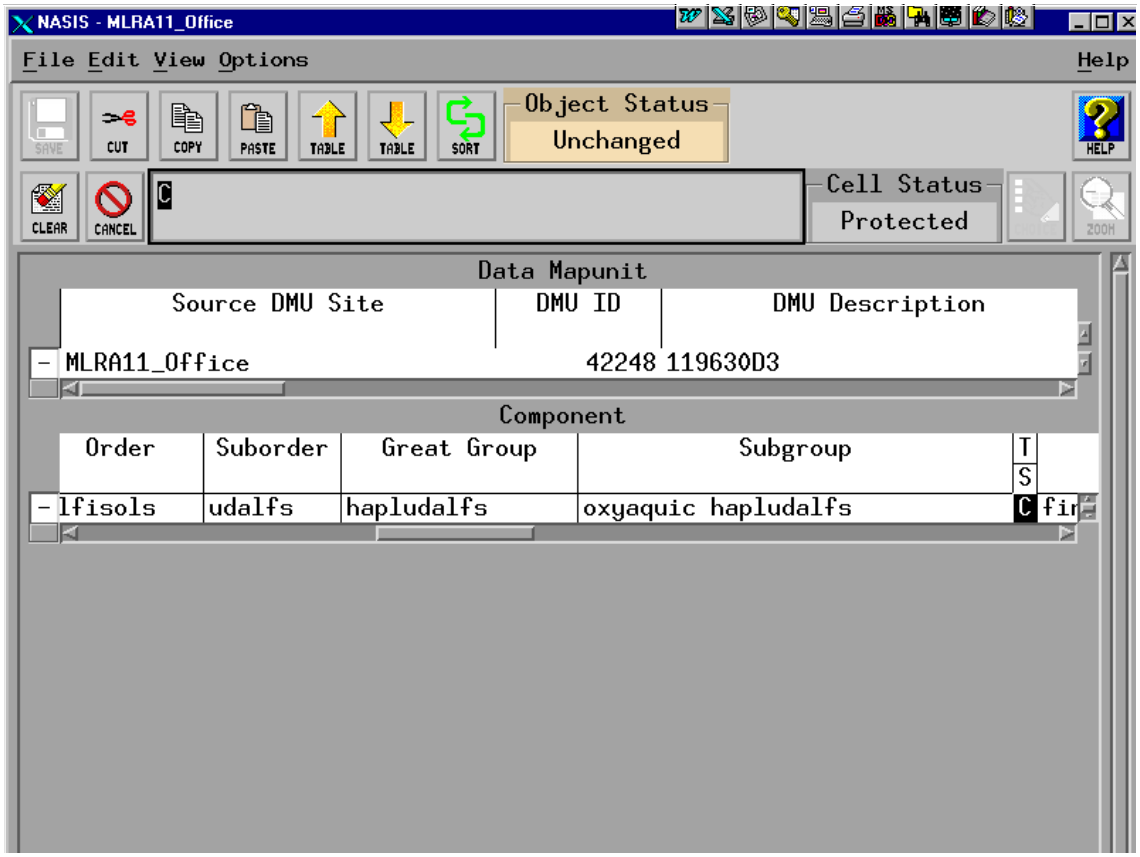
Components

Component Taxonomic Family Mineralogy

Click on “mixed (calcareous)” in Mineralogy row: Either type mixed or choose from Choice list

Click on “not used” in reaction row: Either type calcareous or choose from Choice list

Procedure to Calculate Taxonomic Classification



View
Components
Component
Place cursor on component row
Options
Calculate Data Elements
Apply
(To do all in selected set, click on Use all rows currently loaded)

Copying a text (or word) document into NASIS text Fields.

Exceed icon - right click
Select - tools
Select - toolbar
Select - show

Move the edit box off to the side.

In NASIS session you need to have text window ZOOMed open.

Go to text document.

Highlight text you want to copy.

Copy or Cut the selected text. (this puts the material onto the clipboard)

In the Exceed edit box there is a box w/ an X in the middle of the clipboard. When you put the pointer on it the textbox says Paste Clipboard To X Selection.

Simultaneously, at the same time click both the right and left mouse button.

Move the pointer to the NASIS text box, and simultaneously at the same time click the right and left mouse button.

Cell Copy and Paste Functionality

In NASIS you can copy data from a single cell and paste it into another cell in the same table or a different table.
Use the following technique to copy and paste cell or text data from one table to another. Note: At this time there is a problem doing this with dxpc(nasis-ppp). It will cause an Xt/Motif error and kick you out of NASIS.

1. Highlight the cell you want to copy, by clicking the mouse in the cell.

2. Hit "control key" and "insert key" at the same time. This copies the data to a buffer.

3. Niove to the table and cell you want to paste the data, and highlight the cell by clicking the mouse in the cell.

4. Hit "shift key" and "insert key" at the same time. This pastes the data from the buffer into the edit window for the current active cell.

5. Hit "enter key" to insert the data into the cell. Using the tab key or the mouse will not currently insert the data into the cell, only the "enter key" will.

A variation of this technique can be used to copy text from a text editor into a table cell or another text editor.

1. While in a text editor, highlight the text you want to copy, by clicking and draging the mouse to highlight the text.

2. Hit "control key" and "insert key" at the same time. This copies the text to a buffer.

3. Close the text editor by clicking cancel. Open the text editor in the table you want to paste the data.

4. Move mouse to the point in the text editor you want to paste the data (can be used to insert between existing text).

5. Hit "shift key" and "insert key" at the same time to paste data from buffer.

6. Apply modifications by clicking apply button in text editor.

The data in the buffer can be pasted into multiple cells or text editors, by moving to the next cell

and hit "shift key" and "insert key" at the same time. This can be repeated as often as needed. The buffer retains the data until you exit NASIS or copy

Understanding NASIS Downloads by Bill Frederick

From our standpoint county project leaders will probably not be preforming data downloads for FOCS and SSURGO very often. These downloads are most often preformed after the county has been mapped and all data edited. However, in order for the downloads to work Project Leaders and soil scientists in the field should remember to do the following when completing editing on a county subset, which are some of the more common errors that are encountered when doing a data download:

1. The component classifications need to be calculated through the options menu on a global basis.

2. The Horizon Texture Group needs to be calculated for each horizon. This can be done through the options menu on a global basis.

3. For soils with a "wet" status in a row in the soil moisture table, the low, high and rv values in the "soil - moist_depth-to_top", "soil-moist_depth-to-bottom" columns must be filled in, even if it is the same number.

Example:

Soil moisture top depth			Soil moisture bottom depth		
Low	RV	High	Low	RV	High
20	20	20	40	40	40

These data downloads will most often be preformed by state office personnel, the MLRA Project Leader, or by personnel in the MO Offices.

When preforming the downloads you need to determine what data you want.

For example do you want all components of every data map unit. Even though some may be inclusions added for hydric soils with no data? If not you will need to either run a query to select only components that are greater than a certain percent (ie 15%) or components that are major. In the latter case the major component column in the component table must be filled in with either a “yes” or "no".

You might also want to decide if you want to download miscellaneous units such as gravel pits, water, etc. There is a query that will allow you not to load these types of units.

Data Validations Listing

Name	Table	Elements Used	Conditions Checked
Horizon Depth	Horizon	Top Depth (l,r,h)	Top depth of first horizon must be 0.
		Bottom Depth (i,r,h)	Bottom depth of a horizon must equal top depth of the following horizon.
			Top depth of a horizon must be less than bottom depth of the same horizon.
			Tests are repeated for Low, RV, High
Percent Passing Sieves	Horizon	Sieve #4 (i,r,h)	#4 must be equal or greater than #10.
		Sieve #10 (l,r,h)	#10 must be equal or greater than #40.
		Sieve #40 (l,r,h)	#40 must be equal or greater than #200
		Sieve #200 (l,r,h)	Tests are repeated for Low, RV, High
Particle Size Distribution	Horizon	Total Sand (RV)	Sum of sand, silt and clay must be 100 if all
		Total Silt (RV)	are entered.
		Total Clay (RV)	
Component Percentages	Data Mapunit	Comp Pct (RV)	Sum of all component percents entered for a data mapunit must be no more than 100.
Texture Modifier (by sieves)	Horizon	Sieve #10 (RV)	If the rock fragments > 2mm are 15 % or
		Db 0.33 bar (RV)	more by volume, there must be a texture
		Rock > 10 (RV)	modifier on at least one texture for the
		Rock 3-10 (RV)	horizon.
		Texture modifier	
Texture Modifier (by fragment volume)	Horizon	Frag Volume (RV)	if the sum of all fragment volume percents
		Texture modifier	for the horizon is 15 % or more, there must be a texture modifier on a least one texture for the horizon.
Ksat Population Terms in lieu texture	Horizon	Ksat (RV)	If a term in lieu of texture is entered for a horizon, the saturated hydraulic conductivity (Ksat) must also be entered.
Bulk Density on Andic Soils			
Component			

Taxonomic Subgroup
Tax. Particle Size
Db 0.33 bar (RV)
Bottom Depth (RV)

Texture Class vs.HorizonTotal Sand (l,h)
Particle Size Total Silt (l,h)
Separates Total Clay (l,h)
Texture class

AASHTO ClassHorizonSieve #10 O,h)
Sieve #40 (l,h)
Sieve #200 (l,h)
PI (l,h)
LL (l,h)
AASHTO class

Unified ClassHorizonSieve #4 O,r,h)
Sieve #10 (l,r,h)
Sieve #40 (l,r,h)
Sieve #200 (l,r,h)
PI (l,r,h)
LL (l,r,h)

Unified class

. If particle size begins with "medial" or 'hydrous" and bottom depth of horizon is equal to or less than 50 cm, bulk desity must be equal to or less than 0.9. - If subgroup begins with "andic" or
.aquandic" and bottom depth of horizon is equal to or less than 75 cm, bulk density must be equal to or less than 1.0

- For each texture entered, the horizons ranges for sand, silt and clay must intersect the allowable ranges for that texture.

- For each AASHTO class entered, the horizons ranges of sieve percents and Atterberg limits must intersect the allowable ranges for that class.

- For each Unified class entered, the horizons ranges of sieve percents and Atterberg limits must intersect the allowable ranges for that class.

Calculated data elements Usting

NameTable Elements UsedCalculation Action

Texture GroupTextureTexture classCombines the abbreviations for all texture
NameGroup Texture modifierterms within a group, following sequence
and punctuation conventions, to form the
Terms in lieu texturetexture group name. For example, a "loam"

Stratified flagtexture class with **a** "gravelly" modifier

Texture sequencewould be represented as 'GR-L".
Texture modifier
sequence

Parent MaterialParentPM orderCombines the parent material terms within a

Group NameMaterialPM kindgroup, following standard' g
Group PM originconventions, to form the parentmaterial
group name.

PM modifier

HorizonHorizonDiscontinuityCombines the horizon designation terms for
DesignationMaster a horizon in the proper order to form the
full horizon designation. If multiple suffixes
Suffix are entered, they are ordered as specified in

SubdivisionSoil Taxonomy, not in the order entered.

TaxonomicComponentParticle SizeCombines the taxonomic terms for a
ClassificationParticle Size Modifiercomponent in the proper order to form the
taxonomic classification name. The terms
CE Activity Classare placed in the order listed in the Elements

Reaction ClassUsed column, separated by commas except

Temperature Classbefore the subgroup. Order, Suborder and
Great Group are used only if lower
Mineralogyclassifications are blank. Multiple

Other Familymineralogies are separated with the word
over. Any term with the value *not used is*
Order ignored.

Suborder

Great Group

Subgroup

Water RetentionHorizonOmCalculates the Water Retention values as

0. 1 bar H20 Rock > 10produced by the RV Generator program for

0.33bar H20 Rock 3-10downloading to FOCS.

Produces results for several elements at
15 bar H20 #10 once as products of the same algorithm.

Satiated H20 Db 0.33 bar H20The calculation is named Water Retention on

Db 15 bar H20Total Claythe Calculation Manager choice list.

LEP Only the Representative Values for these elements are calculated, and only the RV's
Tex Mod & Classfor the input elements are used. In the case of Texture, there must be an RV assigned for the calculation to work. This is done by setting the RV column to "Yes' in one and only one row of the Horizon Texture Group table for each horizon. The RV flag must be set even if there is only one Texture Group

record for a horizon.

AASHTO GroupHorizonSieve #200 O,r,h)Computes a low, RV, and high value for the
Index LL (l,r,h)AASHTO group index using the corresponding values for the #200 sieve and
PI (l,r,h)Atterberg limits.

Forms for Palmpilot by Sam Indorante

The Fields of the Mini Description Form (Table 1).

1. Date & Time ID
2. Described By
3. NURA
4. Map Unit
5. County
6. UFM X (easting)
7. UrM Y (northing)
8. Landuse
9. Stoniness %
10. Major Land Form
11. Local Land Form
t2. Geomorphic Component
13. IEII Slope
14. Pedon Position
15. Slope Shape
16. Slope %
17. Aspect (degrees)
18. Core Depdi
19. A Horizon Thicimess
20. Mollic Thickness
21. A Hue
22. A Value
23. A Chroma
24. Surface Todwe
25. Texture.Modifier
26. Modifier %
27. E Thidmess
28. Erosion class
29. Abrupt Textural Change Depth
30. Gley Depth
31. M Chroma Depth
32. Drainage
33. Lime Depth
34. Peoria I-om Thidmess
35. Roxanna Loess Thickness
36. Parent Material 1
37. Parent Material 2
38. Depth to Parent Material 2
39. Parent Material 3
40. Depth to Parent Material 3
41. Depth to Top of Argiflic
42. Argillic Thidmess
43. Fragic Depth
44. Natric Depth
45. Rock Depth
46. Paratithic Contact Depth
47. Lametia Depth
48. % Fragments
49. Palio Depth
50. pH Surface
51. pH Upper Control Section
52. Upper Control Section pH Depth
53. pH Lower Control Section
54. Lower Control Section pH Depth
55. pH @ 125 cm
56. Water Table Depth
57. hiclusions
58. Order
59. Suborder
60. Greatgroup
61. Subgroup
62. Particle Size
63. Mineralogy
64. Reaction
65. Soil Temperature Class
66. Soil Series

Appendix

MLRA Region 11 INSTRUCTION NO. 1

DATE: October 29, 1998

SUBJECT: SOI- Naming Soil Complexes File Code 430 -

Purpose: To transmit suggested procedures for naming soil complex map units within MLRA Region 11. The overall purpose is to help facilitate consistency in naming map units. This instruction provides clarification the National Soil Survey Handbook guidelines and provides recommended procedures to be followed in MLRA Soil Survey Region 11 for naming soil complexes.

Effective Date: This instruction is effective when received.

Background: The NSSH allows two methods for naming soil complexes. This instruction provides guidelines on MLRA Region 11 preferred method for naming these kinds of mapping units. This deals with the use of surface textures in the map unit name if they were the same for both components.

Procedure: Region 11 recommends and prefers using the surface texture in the map unit name when the surface texture is the same for all components (example 1). If the textures are different, use the word complex in the name (example 2).

Example number 1 - when the soils have the same surface texture

Gilford-Monon loams, 0 to 1 percent slopes

Example number 2 - when the soils have different surface textures

Gilford-Monon complex, 0 to 1 percent slopes

Some correlated soil surveys have complex map units with components that have same surface textures but use the word complex in the map unit name. We suggest not going back and changing those survey correlation documents for this instruction. Survey areas correlated in the future are encouraged to use this guideline.

This instruction for naming soil complex mapping units complies with guidelines set forth in NSSH Part 627.09(e)(2) -- Terms Used in Naming Map Units.

Electronic Distribution: soil survey project offices, MLRA project offices, soil liaisons, state soil scientists, and supervisors of NRCS project leader, all within the MLRA Region 11: the National Soil Survey Center, National Cooperative Soil Survey Cooperators and MLRA offices adjacent to MLRA Office 11.

/S/

TRAVIS NEELY
State Soil Scientist/MLRA Region-11 Team Leader

Template for Completing Official Soil Series Descriptions 3/1998

LOCATION?? MI

(Established or Tentative) Series Rev. (Author initials)(Date ??/??)

?? SERIES

The ?? series consists of (depth class), (drainage class) soils formed in (parent material) on (landforms). Permeability is?. Slope ranges from ? to ? percent. Mean annual precipitation is about ? inches, and mean annual air temperature is about ? degrees F.

TAXONOMIC CLASS: ???

TYPICAL PEDON: (map unit name) on a ? facing slope in (land use at site) at an (elevation)?. (Colors are for moist soil unless otherwise stated)

(horizon designator)--? to ? inches; (color)(texture)(textures rubbed and unrubbed for Organic soils)(dry color);(strength, size, kind of structure);(consistence); (amount, size, location) roots; (amount, size, kind) pores; (amount, size, shape, color, location redox features); (amount kind size) rock fragments: (effervescence); (reaction); (distinctness, topography) boundary.(?to ?inches thick)

TYPE LOCATION: ?County,(state);?feet(N,S,E,W) and ?feet(N,S,E,W) of the ?(corner or center) of sec?, T.?.,R.?.U.S.G.S.(quad name) topographic quadrangle;(latitude)?degrees, ?minutes, ?seconds North and (longitude)?degrees, ?minutes, ?seconds West; NAD?.

RANGE IN CHARACTERISTICS: The depth to (base or top of argillic, cambic, spodic, glossic, fragipan, carbonates, lithic/paralithic contact, other contacts) ranges from ? to ? inches. The particle-size control section average? To ? percent clay and ? to ? percent sand. Percent Coarse fragments. Reaction is ? to ? throughout. (Note: If reaction is stated in this paragraph. It should be the same the same throughout the entire profile. If not, delete it from this paragraph and list it in individual horizons).

The? Horizon(s) has hue of ? or ?, value of ? to ?, and chroma of ? to ?. Redoximorphic features have (hue, value, chroma ranges). It is (texture or textures). Average clay content ranges from ? to ?. Average sand content ranges from ? to ?. Rock or pararock fragment content ranges from ? to ?. Rock fragments are mainly (kind, size, lithology). Reaction is ? or ?. (Note: If reaction is listed in each horizon, don't state it in the opening paragraph of RIC)

(Some pedons have an ? horizon).

(Some pedons do not have ? horizons.)

The? Horizon(s) has hue of ? or ?, value of ? to ?, and chroma of ? to ?. Redoximorphic features have (hue, value, chroma ranges.) It is (texture or textures). Average clay content ranges from ? to ?. Average sand content ranges from ? to ?. Rock or pararock fragment content ranges from ? to ?. Rock fragments are mainly (kind, size, lithology). Reaction is ? or ?.

COMPETING SERIES: These are the ?, ?, and ? soils.

NOTES: The list of competing series is obtained from the Soil Classification file maintained at Ames Statistical lab.

The list is available on Internet at: http://www.statlab.iastate.edu/cgi-bin/sc/screports.cgi?-S. This web sit allows you to enter taxonomic classification of the new series and all series with the same classification will be listed. Be aware that not all series have been updated to include cation exchange activity class. Entering the activity class (semiactive) will not list those series that have not been updated. For not it is a good idea to not enter cation exchange activity class on the query form. The resulting series list will include those series that have not yet been updated.

The competing series on the list can be viewed at Internet site:
http://www.statlab.iastate.edu/cgi-bin/osd/osdname.cgi or
http://www.statlab.iastate.edu/cgi-bin/osd/osdquery.cgi?-S
The first site lets you enter one series name and view the series.
The second site lets you put in series taxonomy and all series are listed and can be viewed by selecting from the generated list.

Criteria used to separate series must be stated in the Range in Characteristics section. For example, in order to state that "? soils have more than 8 percent sand in the lower part of the series control section." The RIC paragraph must have a statement to indicate the new series has less than 8 percent sand in the lower part of the control section.

GEOGRAPHIC SETTING: ?? soils formed in (parent material) and are on (landform position) on (landform). Slope gradients range from ? to ? percent. Climate is ?. Mean annual air temperature ranges from ? to ? degrees F., mean annual precipitation ranges from ? to ? inches, frost free days range from ? to ? days, and elevation ranges from ? feet to ? feet above sea level.

NOTES: The temperature and precip data can be obtained from the Internet site:
http://www.wcc.nrcs.usda.gov/water/w_clim.html
Select from the menu " Climate Analysis for Wetlands (individual counties).

GEAGRAPHICALLY ASSOCIATED SOILS: These are the ?, ?, and ? soils.

NOTES: List the soils that most commonly associate with the new series. For each soil listed give its landform position in relation to the new series. Drainage class is commonly listed. Soils in a drainage sequence are sometimes listed. Soils in vegetative sequence are sometimes listed. Some associated soils may be competing series, but generally are not.

For example:
The moderately well drained AAA and RRR soils are in similar and more sloping areas. The III and JJJ soils are on similar nearby landforms and are in a biosequence with MYNEW soils. The poorly drained RRR soils are on broad summits do not have a dark surface layer. The poorly drained SSS soils have mollic epipedons and are on summits farther from the dissecting drainageways MYNEW soils.

DRAINAGE AND PERMEABILITY:? Drained. The potential for surface runoff potential is ? to ? (please refer to new runoff term in the SSM pages 113-115). Permeability is ?. (or Permeability is ? in the upper part and ? in the lower parts of the series control section). In undisturbed areas the depth to the top of an (perched or apparent) seasonal high water table ranges from ? to ? feet for some time in most years

USE AND VEGETATION: Soils are used to ?. Natural vegetation is ?.

DISTRIBUTION AND EXTENT: MLRA? In (state, states, or parts of states). The soils are of ? extent.

MLRA OFFICE RESPONSIBLE: Indianapolis, Indiana

SERIES ESTABLISHED: ? County, (state), 19??.

REMARKS:

ADDITIONAL DATA: (IF AVAIABLE STATE IT AS FOLLOWS: SITE OF TYPICAL PEDON REFERENCE SOIL NUMBER FROM THE SOIL SURVEY AREA, UNIVERSTIY LAB, OR NSSL).